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SITE ASSESSMENT REPORT

Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida
ERIC_5641
FDEP Contract HW 550, Task Assignment SOL-0A118

Prepared for

Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Prepared by

Geosyntec Consultants, Inc.
19321 U.S. Highway 19 North
Building C, Suite 200
Clearwater, FL 33764

Project: FR7522A

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1. INTRODUCTION

1.1 Overview

Geosyntec Consultants, Inc. (Geosyntec) has prepared this Site Assessment Report for the Former Florida State Fire College (FFSFC; herein, "the Site") located at 1501 West Silver Springs Boulevard in Ocala, Marion County, Florida (**Figure 1**) on behalf of the Florida Department of Environmental Protection (FDEP). This work was conducted in accordance with Task Assignment SOL-0A118.

1.2 Objectives

The objectives of this investigation were to further evaluate the extent and magnitude of per- and polyfluoroalkyl substances (PFAS) in Site media including soil and groundwater.

1.3 PFAS Overview

The Interstate Technology and Regulatory Council (ITRC) has developed a series of fact sheets to summarize the latest science and emerging technologies for PFAS. According to the ITRC fact sheets, PFAS consist of more than 4,700 manmade fluorinated organic chemical compounds that have been extensively manufactured since the mid-20th century (ITRC, 2020). Perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) are two perfluoroalkyl substances that are fully fluorinated carbon-chain molecules (United States Environmental Protection Agency (USEPA), 2017). Polyfluoroalkyl substances are not fully fluorinated and have a non-fluorine atom attached to at least one of the carbon atoms (ATSDR, 2017). PFAS are widely used due to their unique physical and chemical properties (e.g., surfactant, oil-repelling, water-repelling, etc.) (ITRC, 2020; USEPA, 2017). One widely recognized use of PFAS is as a component in aqueous film forming foam (AFFF) (USEPA, 2017). AFFF has been stored and used by the military, airports, and other firefighting and fire-training facilities to extinguish hydrocarbon fires (ITRC, 2020; USEPA, 2017). PFAS are emerging environmental contaminants of concern due to evidence of their potential human health effects or environmental risks. When released to the environment, some PFAS have been shown to be stable, mobile, persistent, and bioaccumulative (ITRC 2020; USEPA 2017).

1.4 Assessment Overview

Geosyntec completed Site-wide soil and groundwater assessment activities in October 2020 at FFSFC (Task Assignment HW550-SOL-0A096), and the results indicated that concentrations of PFOA and/or PFOS were detected above FDEP's provisional cleanup target levels (CTLs) in soil and groundwater (see Section 1.5 regarding provisional CTLs). Following the initial assessment, further investigation was needed on the City of Ocala property to the north and east of the Site (**Figure 2**).

Geosyntec continued assessment activities at FFSFC (Task Assignment HW550-SOL-0A118) between March and April 2021 and cumulatively collected a total of 290 soil samples from 74 boring locations, 93 direct push technology (DPT) groundwater samples from 25 screen point locations, 1 groundwater sample from 1 irrigation supply well, and associated quality assurance and quality control (QA/QC) samples (**Table 1** and **Figure 3**). Additionally, in May 2021, Geosyntec oversaw the installation of 8 monitoring wells across the Site (**Figure 3**). The central to northeastern portion of the Site contains the most elevated concentrations in soil and groundwater detected at the Site. Additional details regarding observed Site-wide concentrations are provided in Section 4.

Assessment activities are ongoing, and this report summarizes assessment activities conducted through June 2021, including monitoring well sampling. Details regarding these sampling activities are further discussed in Section 4.

Prior to each assessment event, Geosyntec prepared a Work Plan that described the proposed sampling activities for FDEP review. The Work Plans included figures showing the proposed sampling locations and tables summarizing the sampling locations, matrices, depth intervals, sampling methods, laboratory analyses, rationale, and screening criteria. A comprehensive table with samples collected at the Site to-date is provided as **Table 1**.

1.5 Laboratory Analysis and Data Screening Process

Site samples collected from environmental media (groundwater and soil) were packed on wet ice and transported under chain-of-custody to the FDEP Laboratory. Samples were analyzed for up to 27 PFAS constituents using USEPA Method 8321B and FDEP Standard Operating Procedure (SOP) LC-001-3.

CTLs for PFAS constituents have not been promulgated under Chapter 62-777, Florida Administrative Code (FAC). Following the procedures promulgated in Chapter 62-777 FAC, Chapter 62-780 FAC, and at the request of FDEP, the University of Florida (UF) calculated provisional soil CTLs (SCTLs) for residential-direct exposure (R-), commercial/industrial-direct exposure (I-), and provisional groundwater leachability (L-) SCTLs for PFOS and PFOA. Following the promulgated procedures, UF also calculated provisional groundwater CTLs (GCTLs) for PFOS and PFOA. The formulas, assumptions, and chemical-specific parameters used in the calculations are presented in letters prepared by UF included in **Appendix A**. The following table summarizes the provisional CTLs.

Provisional Cleanup Target Level	**PFOS**	**PFOA**	**PFOS + PFOA***	**Units****
R-SCTL	1,300	1,300	Not applicable	µg/Kg
I-SCTL	25,000	25,000	Not applicable	µg/Kg
L-SCTL	7	2	Not applicable	µg/Kg
Groundwater	70	70	70	ng/L

* PFOS+PFOA indicates the summation of PFOS and PFOA

** µg /Kg indicates micrograms per kilogram and ng/L indicates nanograms per liter.

The provisional CTLs were used as the primary screening criteria to evaluate the nature and extent of PFAS constituents in soil and groundwater. The analytical results of the media sampled at the Site were evaluated to identify PFAS constituents present at concentrations that exceed applicable screening criteria and determine areas of the Site that may require further investigation. For general Site characterization, both soil and groundwater were screened against human health criteria. Soil data were compared to the provisional L-, R-, and I-SCTLs, and groundwater data were compared to the provisional GCTLs.

The FDEP calculated provisional GCTLs for PFOA and PFOS are 70 ng/L, individually or the summation of both compounds. A concentration of 70.4 ng/L would be rounded to 70 ng/L and would not exceed the FDEP's provisional GCTL.

Provisional L-SCTLs for PFOA and PFOS were calculated to be 0.002 mg/kg and 0.007 mg/kg. FDEP permits for the rounding of analytical results to the same number of significant figures used to express the applicable CTL, so concentrations are therefore rounded to the 3rd decimal place (FDEP, 2021c). For example, a PFOA concentration of 0.00249 mg/kg (reported as 2.49 ug/kg by the FDEP lab) would round to 0.002 mg/kg and a PFOS concentration of 0.00749 (reported as 7.49 ug/kg by the FDEP lab) would round to 0.007 mg/kg. Neither would exceed its provisional L-SCTL. It is important to note that leachability numbers are estimates based on a set of standard parameter values. Leaching may occur at concentrations greater or less than the criterion depending on actual site conditions.

2. SITE DESCRIPTION AND HISTORY

2.1 Site Location

The Site is located at the Hampton Center at 1501 West Silver Springs Boulevard in Ocala, Marion County, Florida. The Site property lies within Section 18, Township 15 South, and Range 22 East and encompasses approximately 4.64 acres. According to the FDEP website (https://floridadep.gov/waste/waste-cleanup/content/former-florida-state-fire-college), the FFSFC included an Arson Laboratory School, command post, large warehouse, burn buildings, and other fire training areas before relocating to the current Florida State Fire College in Reddick, FL. The Hampton Center, which contains a satellite campus for the College of Central Florida, now resides on the FFSFC property.

The Site is bordered by the City of Ocala Dr. Martin Luther King, Jr. Recreational Complex to the east and north and mixed residential/commercial properties to the south and west. The United States Geological Survey topographic map showing the Site location is provided as **Figure 1**. The Site Vicinity Map is presented in **Figure 2**.

2.2 Site Utilities

Multiple underground utility lines including water, sanitary, stormwater, electric, telecommunication, and gas are located within the areas of environmental assessment activities at the Site. The Site is served by an on-Site water-supply well ("Irrigation Well") for grounds maintenance. The Irrigation Well is used on a routine basis (**Figure 3**). The Irrigation Well is screened from 105 to 140 feet (ft) below land surface (BLS), and the average daily volumes of water withdrawn are unknown.

2.3 Topography and Drainage

The topography of the Site is generally flat with some low-lying areas. The elevation across the site varies from approximately 65 to 80 ft above mean sea level relative to the North American Vertical Datum 1988 (**Figure 1**).

The Site Vicinity Map (**Figure 2**) depicts a low-lying stormwater basin on Site along the eastern property boundary and along the north/northeastern property boundary. Multiple stormwater grates are located within the parking lot of the Hampton Center and drain into the low-lying stormwater basin during rainfall events. The stormwater basin was observed to hold water once during a high-volume rainfall event.

On a larger scale, stormwater that overflows low lying basins within the site and the adjoining park is directed via the Martin Luther King, Jr. Avenue stormwater sewer network to a holding pond (designated by the City as DRA #127) located within the northeast corner of the Dr. Martin Luther King, Jr. Recreational Complex.

2.4 Potable Water Wells

A portable well desktop survey was conducted within a 1-mile radius of the Site through the Florida Department of Health (FDOH) website (FDOH, 2020). No potable wells were identified within a 0.5-mile radius, and 3 active potable wells (420073101, 420074401, AAK5683) were identified between a 0.5- and 1-mile radius from the Site (**Figure 4**). The FDOH was requested to conduct a potable supply well sampling event within a 1-mile radius of the Site based on the results from the preliminary assessment conducted in October 2020, and as of July 2021 the FDOH has not conducted a sampling event of the 3 wells.

Geosyntec obtained an Environmental Data Resources, Inc. (EDR) Offsite Receptor Report in November 2020. The EDR was used to define the residential population within a 1-mile radius of the Site and identify public and environmental sensitive potential receptors such as wilderness areas, natural resources, schools, nursing homes, day care centers, medical centers, hospitals, colleges, arenas, and prisons. Potential receptors within a 1-mile radius of the Site are shown on **Figure 4**.

2.5 Operational Description

According to the FDEP website, firefighting training was performed at this facility starting in 1939 before being relocated to its current location in Reddick, Florida. While at this Ocala address, the college held approximately six classes per year. Firefighting exercises were performed in the north and central portions of the Site. The east-central portion of the Site contained a large warehouse with an 8 x 16 ft sump adjacent to the eastern wall of the building ("warehouse sump"). North of the warehouse was a concrete block structure used as a target for fire appliance testing and practice. Water from the appliances was aimed at the target and deflected by the concrete block structure into two adjacent sumps ("target sump") before traveling through a buried line to the warehouse sump. Hay or wooden pallets were burned with diesel fuel in seven burn pits across the Site and extinguished. Two burn buildings, a four-story structure and a two-story structure, and a former tank trailer were located in the west-central portion of the Site, and pallets and fuel were also burned and extinguished at these locations. Historically, the Site was relatively flat, but there was off-Site drainage to the northeast and a drainage ditch ("historic drainage ditch") that extended from the two-story burn building and former tank trailer area to a storm sewer on the west-central Site boundary (Ecology and Environmental, Inc. (E&E), 1992). Historical documents and photographs show that the facility stored up to 25 AFFF in drums on-Site with 19 drums in the target sump area and 6 drums in the warehouse sump area. These drums were observed in the early 1990's during an environmental assessment of hydrocarbon contamination related to fire training exercises (FDEP, 2021a). Historical Site features provided by FDEP are shown in **Figure 5**, and historical Site photos are included as **Appendix B**.

2.6 Previous Investigations

According to the FDEP Information Portal website, no known environmental investigations for PFAS have been previously conducted or reported to the FDEP for the Site, but an environmental assessment for hydrocarbon contamination was conducted in the early 1990's following a written complaint from a resident of Ocala (FDEP, 2021b). Assessment activities conducted by E&E began in September 1990 mark the initial environmental investigations at the Site (E&E, 1992). Following the submittal of the Preliminary Environmental Contamination Assessment Report by E&E, there is no record of any assessment activities on the FDEP Information Portal until the preliminary PFAS assessment conducted by Geosyntec in October 2020.

3. GEOLOGY AND HYDROGEOLOGY

3.1 Regional Geology and Hydrogeology

The Site is in the Central Valley physiographic subdivisions of the Central or Mid-Peninsular Zone geomorphologic province of Florida (Hoenstine et al., 1988). The Central Valley is a low, flat area that extends over central Marion County. It ranges in elevation from approximately 50 to 75 ft National Geodetic Vertical Datum. The Oklawaha River watershed runs through this subdivision. Also associated with this subdivision are lakes and riverine wetlands. These features are mantled by a thin veneer of sand. The clay content generally increases with depth (Lane and Hoenstine, 1991).

The vast majority of Marion County has karst terrain or topography. This includes sinkholes and cavernous springs. Throughout central Marion County, primarily within the Central Valley subdivision and the Oklawaha River watershed, more than 200 feet thick cohesive sediments interlayered with discontinuous carbonate beds exist. Sinkholes in this area are few. When they do exist, they are of large diameter, deep and are the cover-collapse variety (Lane and Hoenstine, 1991; Sinclair and Stewart, 1985).

There are three hydrostratigraphic units present in Marion County that include: the surficial aquifer system, intermediate aquifer system/confining unit and the Floridan aquifer system. The surficial and intermediate aquifer systems may occur sporadically in Marion County (Lane and Hoenstine, 1991).

The surficial aquifer system consists of the Pleistocene to Holocene Epoch undifferentiated sand, clayey sand and clay sediments and the sands and minor clays of the Cypresshead Formation (Fm). This also includes what was formerly referred to as the Jackson Bluff Fm, Alachua Fm, and Fort Preston Fm. The surficial aquifer system does not exist as a continuous unit in many parts of Marion County. This is particularly evident in western Marion County where the Hawthorn Group is absent. Sand and clay lenses may allow for the existence of a perched water table that can retain water for a short length of time. A surficial aquifer system may be present in areas having an appreciable thickness (tens of feet) of interbedded sand and clay deposits. Where present, the surficial aquifer system (water table) is found generally 10 to 40 ft BLS. The surficial aquifer system is recharged primarily by rainfall and is reportedly not used as a major source of water in the site; however, where present, it may be used for stock and irrigation watering (Lane and Hoenstine, 1991; Miller, 1986).

The intermediate aquifer system/confining unit may be present in isolated pockets of relatively thick Miocene Epoch Hawthorn Group sediments. These sediments consist of interbedded sands, sandy clays, clayey sands, dolostones and clays. They typically have a high phosphate content. The Hawthorn Group is generally absent in western Marion County. Where present, it averages approximately 50 feet thick in central and eastern Marion County and approximately 20 to 30 ft thick in Ocala. The intermediate aquifer system is reportedly not used as a major source of water in the county (Lane and Hoenstine, 1991).

The Floridan aquifer system is the major source of drinking water in the area and consists of carbonate (limestone and dolomite) deposits of the Eocene Epoch. The most productive portion is referred to as the Upper Floridan aquifer. The units include, in descending order, the Ocala Limestone Fm and Avon Park Fm. The Upper Floridan aquifer is solution riddled and faulted. The Floridan aquifer exists under unconfined to semi-confined conditions and the top of the aquifer can be found as shallow as land surface in some parts of Ocala. The Floridan aquifer system is between 600 ft (southwest Marion County) to 1,900 ft (southern Marion County) thick. The Ocala area is in an area of high recharge to the Floridan aquifer system (Lane and Hoenstine, 1991).

The Floridan aquifer system in Marion County consists of two major permeable zones. The two zones – the Upper and Lower Floridan aquifers – are separated by middle semi-confining units commonly referred to as Middle Confining Unit I and/or Middle Confining Unit II. Middle Confining Unit I is present in the eastern half of Marion County while Middle Confining Unit II is present in mostly in the western half. The Upper Floridan aquifer consists of, in descending order, the Ocala Limestone and the upper portions of the Avon Park Fm. Middle Confining Unit I is a zone of slightly lower permeability and consists of dense dolostone interbedded with limestones within the middle third of the Avon Park Fm. The contrast in permeability between rocks in Middle Confining Unit I and the rocks of the Upper and Lower Floridan aquifer is less than any other Middle Confining Unit in the Southeastern United States. Solution cavities and dissolution enlargement of fault planes and fractures transecting this semi-confining unit allows for interchange of water between the two permeable sections of the aquifer. Middle Confining Unit II consists of low permeability anhydritic/gypsiferous dolomite and dolomitic limestone. It is present within the middle portion of the Avon Park Fm. Middle Confining Unit II is considered a non-leaking confining unit. The Lower Floridan aquifer consists of, in descending order, the lower third of the Avon Park Fm, the Oldsmar Fm and upper portions of the Cedar Key Fm. The Lower Floridan aquifer generally contains highly mineralized water. In the northern half of Lake County, where Middle Confining Unit II is absent, the contrast in permeability between rocks in Middle Confining Unit I and the rocks of the Upper and Lower Floridan aquifer is less than any other Middle Confining Unit in the southeastern United States (Miller, 1986).

3.2 Site-Specific Geology

Geosyntec documented lithology from soil borings and monitoring well installations, and two cross section transects were drawn to generalize Site lithology in **Figures 6**, **7**, and **8**. Lithology documented during DPT soil borings consists of sand with silt/clay nodules that extend from the land surface to depths ranging from 0.5 to 18 ft BLS and is underlain by an interbedded sandy clay and clayey sand with minor amounts of chert. This unit is underlain by limestone, and as shown on the cross sections (**Figures 7** and **8**), the contact depth between the unconsolidated sediments and limestone varies. Limestone generally occurs at approximately 30 ft BLS at the Site, but the depth ranges from 19 to 36 ft BLS (Geosyntec, 2020 and 2021a).

The general lithology observed during monitoring well installation at FFSFC and the surrounding area consists of surficial sands of variable thickness (5 to 20 ft observed) with varying amounts of fines (plastic and non-plastic). The surficial deposits are underlain by medium to high plastic, brown/greenish grey clay of varying thickness (20 to 30 ft observed) and density identified as

Hawthorn Group sediments. These sediments also include interbedded chert, which was observed at two monitoring well locations. The clay unit rests on top of white to cream fossiliferous, friable limestone consistent with the Ocala Limestone of the Upper Floridan aquifer (Geosyntec, 2021b).

3.3 Site-Specific Hydrogeology

Geosyntec collected depth-to-groundwater (DTW) measurements across the Site in June 2021 prior to groundwater sampling. Based on the measurements, groundwater surface elevation contour figures were generated for monitoring wells screened from 20 to 45 ft BLS and 100 to 120 ft BLS. **Figure 9** depicts groundwater elevations in wells screened from 20 to 45 ft BLS, and **Figure 10** depicts groundwater elevations in wells screened from 100 to 120 ft BLS.

Groundwater in wells screened from 20 to 45 and 100 to 120 ft BLS generally flows east/northeast across the Site, which is consistent with historic flow directions from 1992 (Ecology and Environment, Inc., 1992). Based on data from the wells installed by Geosyntec, the difference in groundwater elevations between shallow (i.e., screened between 20 and 45 ft BLS) and deeper wells (i.e., screened between 100 to 120 ft BLS) in each well pair are 0.1 ft or less, which indicates that a strong vertical hydraulic gradient is not present. The similar groundwater flow direction and groundwater elevations in the shallow and deeper wells, along with observed lithology during well installation activities, demonstrates that these wells are installed in the Ocala Limestone Fm of the Upper Floridan aquifer. Due to the absence of the surficial aquifer and the inconsistent presence of clays, the Upper Floridan aquifer is under unconfined to semi-confined conditions across the Site.

4. SITE CHARACTERIZATION

4.1 Overview

Field activities were performed in accordance with FDEP SOPs for Field Activities and internal SOPs for PFAS sampling that were developed by Geosyntec. The sampling locations (including QA/QC samples), matrices, depth intervals, sampling methods, laboratory analyses, rationale, and screening criteria used during the assessment activities are summarized on **Table 1**, which reflects any deviations from the Site Assessment Work Plans (FDEP, 2021b). Sample locations are provided on **Figure 3**, and field forms and laboratory analytical reports are accessible on the FDEP Information Portal (FDEP, 2021b).

Geosyntec prepared the Site-specific Health and Safety Plan (HASP) in October 2020 and updated in March 2021 to address project-specific hazards that were known or suspected to be present due to existing conditions and work to be performed at the Site. The HASP meets the requirements specified in the Occupational Safety and Health Administration Hazardous Waste Operations and Emergency Response program and Geosyntec's internal health and safety standards. Geosyntec maintained the HASP on-Site during assessment activities.

4.2 Utility Locate

Geosyntec observed GeoTek Services, LLC (GeoTek) perform underground utility surveys prior to soil sampling and drilling activities on 12 October 2020 and 22 March 2021 and prior to monitoring well installation activities on 17 May 2021. During the survey, GeoTek utilized electromagnetic induction and ground penetrating radar to identify any potential subsurface utilities or obstructions. The suspected underground utilities were marked on land surface and sampling locations were repositioned as necessary to avoid potential subsurface conflicts.

4.3 Soil Assessment

Geosyntec collected hand-auger soil samples at a total of 74 boring locations during the October 2020 and March/April 2021 assessment activities. Soil sampling locations are presented on **Figure 3**, and a lithology description of each soil boring location is accessible on the FDEP Information Portal (FDEP, 2021b).

4.3.1 Soil Sampling Methodology

Geosyntec collected a total of 290 discrete soil samples from 74 boring locations for laboratory analysis during Site assessment activities. Soil samples from depths less than 6 ft BLS were collected using decontaminated stainless-steel hand augers, and soil samples from depths greater than 6 ft BLS were collected via DPT soil samplers to the approximate depth of the observed water table. Completed soil borings were grouted upon completion. Soil sample intervals and identifications are included in **Table 1**.

QA/QC samples collected in October 2020 and March 2021 consisted of 29 equipment blanks (EQB-2 through EQB-20 and EQB-29 through EQB-39) that were collected from DPT soil samplers and hand auger buckets and three field reagent blanks (FRB-2, FRB-3, and FRB-6) that were collected from the hand auger and DPT decontamination area.

4.3.2 Soil Results and Conclusions

Comprehensive laboratory analytical results for soil samples are summarized on **Table 2** and **Figure 11.** Summaries of PFOS results are presented by sample depth interval on **Figure 12** through **Figure 17**, and summaries of PFOA results are presented by sample depth interval on **Figure 18** through **Figure 23**. Soil analytical results indicate the following:

- Concentrations of PFOS are above the provisional L-SCTL of 7 µg/Kg at 26 locations (SB-1, SB-2, SB-3, SB-5, SB-9, SB-13, SB-15, SB-17, SB-18, SB-19, SB-23, SB-24, SB-27, SB-29, SB-30, SB-32, SB-33, SB-34, SB-37, SB-41, SB-42, SB-45, SB-48, SB-57, SB-58, and SB-70) near the former fire training areas; and
- Concentrations of PFOA are above the provisional L-SCTL of 2 µg/Kg at 10 locations (SB-2, SB-3, SB-13, SB-14, SB-15, SB-28, SB-29, SB-30, SB-35, and SB-36) near the former fire training areas.

The results indicate that PFAS soil impacts extend from the land surface down to the water table in the areas of the warehouse sump, target sump, and near the historic drainage ditch. The results indicate PFAS soil impacts are horizontally delineated at all depth intervals except southeast of SB-42 and east/west of SB-45, SB-57, and SB-58 on the western side of the Site. Based on these results and **Figure 5**, the historic drainage ditch that directed fluids and runoff from the fire training area to the western portion of the site likely impacted soils. The current Hampton Center building was constructed in 2006, and impacted soils may extend beneath the building. Additional soil sampling may be warranted to gain complete horizontal delineation in this area. The greatest PFAS-impacted soils across the Site are associated with PFOS, and the highest concentrations detected are around the warehouse sump and target sump documented in **Figure 5**.

4.4 Groundwater Assessment

During Site assessment activities, Geosyntec collected DPT screen point groundwater samples at 25 locations to assess groundwater contamination and assist in determining the locations of permanent monitoring wells. Geosyntec installed a total of 8 permanent monitoring wells at the Site in May 2021. Well construction details are summarized in **Table 3**. Screen point, monitoring well, and irrigation supply well locations are presented on **Figure 3**.

4.4.1 Groundwater DPT Investigation

Geosyntec subcontracted Preferred Drilling Solutions (PDS) to conduct DPT groundwater sampling between October 2020 and April 2021 using top-down groundwater sampling techniques at 25 screen point locations. DPT groundwater sampling was conducted using a 4-ft stainless-steel DPT screen point sampler at up to 4 intervals between 31 ft BLS and 90 ft BLS. Drilling refusal was encountered at 10 screen point locations, and if the proposed depth intervals were not reached, a groundwater sample was taken above the depth of refusal. Groundwater samples were collected by inserting new high-density polyethylene (HDPE) tubing through the drilling rods to the groundwater sampler and pumping water via a peristaltic pump. A decontaminated check-ball valve was installed on the end of the HDPE tubing prior to inserting the tubing through the drilling rods. Groundwater was manual lifted using the check-ball valve when the peristaltic pump did not produce water. The completed groundwater borings were backfilled with Portland cement. The laboratory analytical reports are accessible on the FDEP Information Portal (FDEP, 2021b). Purge water and decontamination water generated during DPT groundwater sampling activities was containerized and transported off-Site for disposal (see Section 4.6).

QA/QC samples collected in October 2020 and March/April 2021 consisted of 9 equipment blanks (EQB-1 and EQB-21 through EQB-28) that were collected from the DPT screen point samplers used to sample groundwater and two field reagent blanks (FRB-1 and FRB-4) that were collected from the DPT decontamination area.

4.4.2 Permanent Monitoring Well Installation

Geosyntec subcontracted PDS to install eight permanent monitoring wells [DEPMW-1 (100-120') through DEPMW-8 (20-40')] in May 2021. Monitoring well locations are presented on **Figure 3**.

PDS installed the 8 monitoring wells to depths of 40, 45, and 120 ft BLS using the rotasonic technique. A post-hole digger was used to confirm the absence of subsurface utilities to a depth up to 5 ft BLS or refusal prior to installing the wells. Continuous soil core samples were collected for lithologic description prior to monitoring well installation. Based on lithologic descriptions, the eight monitoring wells are installed at varying depths within the Upper Floridan aquifer in the Ocala Limestone Fm. The depth of the shallow monitoring wells varied slightly because DEPMW-8 (20-40') was installed in a low-lying stormwater basin; thus, decreasing the depth to groundwater. Field boring logs containing lithologic descriptions can be accessed on the FDEP Information Portal (FDEP, 2021b).

Monitoring wells were constructed with 20 ft of 2-inch diameter polyvinyl chloride (PVC) well screen slotted at 0.010 inches and 2-inch diameter PVC riser to land surface. During installation of monitoring wells with a total depth of 120 ft BLS, a temporary override casing was installed to a depth at least two feet into limestone (where encountered; approximately 40 ft BLS) to prevent seepage across the limestone. Filter packs were constructed with 20/30 silica sand from the well terminus to approximately 2 ft above the top of the well screen. An approximately 1-ft thick fine sand seal (30/65 sand) was added above the filter pack to the monitoring wells screened across the water table, and an approximately 4-ft thick bentonite pellet seal was installed above the filter pack for the monitoring wells with submerged well screens (screened from 100 to 120 ft BLS). The remaining annular space above the filter pack seal was filled with Portland Type I/II grout to land surface. The monitoring wells were completed as flush mounts with 8-inch bolt-down manhole covers in 2 ft by 2 ft concrete well pads. The monitoring wells were developed using an electric submersible pump until the volume of purge water equivalent to three 55-gallon drums were pumped out of each well. Purge water generated during well development activities was containerized and transported off-Site for disposal (see Section 4.6). Monitoring well construction details are provided in **Table 3**. Well construction and development field forms can be accessed on the FDEP Information Portal (FDEP, 2021b).

QA/QC samples collected in May 2021 consisted of one field reagent blank (FRB-7) that was collected near the monitoring well decontamination area and two equipment blanks (EQB-40 and EQB-41) collected from the rotasonic drilling rods and casing.

4.4.3 Monitoring Well Surveying

On 14 June 2021, Kugelmann Land Surveying, Inc., a Florida-licensed surveyor, conducted a survey of the top-of-casing (TOC) elevations (North American Vertical Datum of 1988) and horizontal coordinates (Florida State Plane Coordinate System, East Zone, North American Datum of 1983) at the eight permanent monitoring well locations plus VISAMW [M-0200], an existing monitoring well off-Site. Monitoring well TOC elevations are included in **Table 4**. **Figure 3** depicts the locations of the monitoring wells using the surveyed horizontal coordinates.

4.4.4 Depth-to-Groundwater and Groundwater Sampling Methodology

Geosyntec measured DTW in the nine wells within the Site monitoring well network [DEPMW-1 (100-120') through DEPMW-8 (20-30')] and VISAMW [M-0200] on 14 June 2021 prior to groundwater sampling. Groundwater levels were measured to the nearest 0.01 ft using an electronic water-level indicator.

Groundwater samples were collected on 14 June 2021 via a submersible pump after stabilization of water quality parameters including temperature, conductivity, pH, turbidity, and dissolved oxygen. One duplicate sample was collected at DEPMW-8 (20-40') [labeled DEPMW-8 (20-40') DUP]. Groundwater sampling logs, calibration forms, and laboratory analytical reports can be accessed on the FDEP Information Portal (FDEP, 2021b). Purge water generated during well sampling activities was containerized and transported off-Site for disposal (see Section 4.6).

QA/QC samples from the June 2021 event associated with groundwater sampling consisted of one field reagent blank (FRB-5) that was collected near on-Site monitoring wells and one equipment blank (EQB-42) that was collected from the submersible pumps used for sampling.

4.4.5 Irrigation Well Sampling Activities

Geosyntec collected a water sample from the on-Site Irrigation Well faucet located in the northwestern corner of the property on 23 March 2021. The Irrigation Well is routinely used, but the volumes of water withdrawn from the well are unknown. Geosyntec assumes the Irrigation Well is installed in the Upper Floridan aquifer based on the screened interval of 105 to 140 ft BLS.

The Irrigation Well faucet was opened, and the water was allowed to run for approximately 5 minutes prior to collecting a grab sample. Laboratory analytical reports are accessible on the FDEP Information Portal (FDEP, 2021b).

4.4.6 Groundwater Elevation Results

DTW measurements and the surveyed top-of-casing elevations were used to calculate groundwater elevations presented in **Table 4**. The groundwater elevation data were plotted, and groundwater elevation maps are provided on **Figure 9** (wells screened from 20 to 45 ft BLS) and **Figure 10** (wells screened from 100 to 120 ft BLS). Groundwater in the wells screened within both depth intervals was generally flowing east/northeast, across the Site in June 2021. These results are generally consistent with observed historic flow directions (E&E, 1992).

Based on data from the wells installed by Geosyntec, the difference in groundwater elevations between shallow (i.e., screened between 20 and 45 ft BLS) and deeper wells (i.e., screened between 100 to 120 ft BLS) in each well pair are 0.1 ft or less, which indicates that a strong vertical hydraulic gradient is not present. The similar groundwater flow direction and groundwater elevations in the shallow and deeper wells, along with observed lithology during well installation activities (Section 3.2) demonstrates that these wells are installed in the Ocala Limestone Fm of the Upper Floridan aquifer.

4.4.7 Groundwater Sampling Results and Conclusions

Analytical laboratory results from DPT screen point samples collected in October 2020 and March/April 2021 are summarized in **Table 5**, and groundwater samples collected from monitoring wells are summarized in **Table 6.** The comprehensive results are depicted on **Figure 24** and **Figure 25**. The vertical profile of PFOS and PFOA is depicted across A-A' in **Figure 26** and B-B' in **Figure 27**.

Results from the sampling events indicate the following:

- Concentrations of PFOA and/or PFOS are detected above the laboratory method detection limit (MDL) in each of the 25 DPT screen point locations. Concentrations of PFOA and/or PFOS exceed their respective provisional GCTLs at 23 of 25 DPT screen point locations. SP-14 (set in a relic paleosink) and SP-25 (side-gradient) are below provisional GCTLs. The screen point exceedances are located within or downgradient of areas with PFOA and PFOS concentrations in soil above the provisional L-SCTLs. The highest concentrations of PFOA+PFOS are detected at SP-5, which is located within the warehouse sump area where drums of AFFF were stored.
- Concentrations of PFOA and/or PFOS are detected above the laboratory MDL in each of the 5 water-table monitoring well locations in the 20 to 45 ft BLS zone. Concentrations of PFOA and/or PFOS exceed their respective provisional GCTLs at DEPMW-2 (25-45'), DEPMW-6 (25-45'), DEPMW-8 (20-40'), and VISAMW [M-0200]. The highest concentrations of PFOA+PFOS in the 20 to 45 ft BLS zone are detected at DEPMW-8 (20-40'), which is located within the warehouse sump area where drums of AFFF were stored.
- Concentrations of PFOA and/or PFOS are detected above the laboratory MDL in each of the 5 monitoring well locations in the 100 to 120 ft BLS zone, including the Irrigation Well. Concentrations of PFOA and PFOS exceed their respective provisional GCTLs in March 2021 at the 5 locations. The highest concentrations of PFOA+PFOS in the 100 to 120 ft BLS zone are detected at DEPMW-6 (100-120'),

which is located downgradient from the warehouse sump and target sump areas where drums of AFFF were stored.

- PFOS concentrations are generally higher than PFOA concentrations across the Site.

Soil sampling data indicate that the northeastern portion of the Site in the warehouse sump area and target sump area likely have been impacted by the use or storage of AFFF. Groundwater within and adjacent to this area is impacted with concentrations of PFOA+PFOS greater than 11,000 ng/L (over 100x the provisional GCTL) in some samples, and impacted groundwater extends from the water table down to a depth of at least 120 ft BLS. Impacted groundwater is present downgradient from the warehouse and target sump areas towards NW 12th Avenue, and PFOA+PFOS concentrations are between 400 ng/L and 12,000 ng/L immediately downgradient [DEPMW-8 (20-40'), SP-15 (from 41 to 90 ft BLS), SP-16 (from 36 to 82 ft BLS), and SP-17 (from 36 to 86 ft BLS)].

Concentrations of PFOA+PFOS are also present in groundwater upgradient on the western property boundary, along NW Martin Luther King, Jr. Avenue [SP-8 (from 32 to 90 ft BLS), SP-9 (from 31 to 65 ft BLS), and SP-10 (from 36 to 90 ft BLS)]. The extent and magnitude of PFAS concentrations in this area is likely associated with the historic drainage ditch shown on **Figure 5** or other Site-related characteristics (e.g., preferential flow zones, seasonal groundwater flow changes, etc.).

Upgradient and side-gradient to the south, along Silver Springs Boulevard, concentrations of PFOA+PFOS in DPT screen point samples and monitoring wells are above the provisional GCTL and indicate that delineation is incomplete. Concentrations of PFOA+PFOS are present in groundwater side-gradient to the north along NW 4th Street above the provisional GCTL and indicate that delineation is incomplete.

Data show that vertical and horizontal delineation is incomplete, and additional groundwater sampling and/or monitoring well installation is warranted.

Downgradient of the former drum area, SP-14 (36 to 90 ft BLS) does not exceed the provisional GCTLs. Limestone was not encountered during drilling, and the lithology appeared to be dark brown/black in color, which suggests organic material that likely is associated with a relic karst feature. Further lithologic assessment is warranted in this area.

4.5 Decontamination Procedures

Decontamination activities were performed in accordance with Geosyntec internal SOPs for PFAS sampling at a designated staging and laydown area. Decontamination procedures utilized for non-disposable, reusable soil and groundwater sampling equipment included decontaminating the sampling equipment in 5-gallon HDPE buckets. The sampling equipment was first submerged and scrubbed in at least two 5-gallon HDPE buckets filled with a solution of Liquinox detergent and PFAS-free water provided by FDEP and then submerged in at least two 5-gallon HDPE buckets filled with PFAS-free water. This sequence of scrubbing and rinsing was performed twice for each hand auger bucket and submersible pump and then followed by a final pour-over rinse of PFAS-free water. Equipment blanks were collected from decontaminated hand auger buckets in October 2020 (EQB-2 through EQB-16) and March/April 2021 (EQB-29 through EQB-36). Additionally, one equipment blank (EQB-42) was collected from a decontaminated submersible pump used to sample the newly installed monitoring wells.

The decontamination procedures followed for DPT sampling and monitoring well installation equipment included pressure washing DPT and rotasonic drilling equipment. Drilling equipment was decontaminated using a pressure washer and Liquinox detergent followed by a series of rinses using PFAS-free water over a constructed wooden and plastic sheeting decontamination pit that collected decontamination fluids. Decontaminated equipment was staged on clean plastic sheeting prior to use. Decontamination fluids were drummed as investigation-derived waste (IDW) and disposed off-Site. Equipment blanks were collected from DPT soil sampling equipment in October 2020 (EQB-17 through EQB-20) and March/April 2021 (EQB-37 through EQB-39). An equipment blank (EQB-1) was collected from a decontaminated DPT groundwater sampler in October 2020, and equipment blanks (EQB-21 through EQB-28) were collected from decontaminated DPT groundwater samplers in March/April 2021. During monitoring well installation, equipment blanks (EQB-40 and EQB-41) were collected from rotasonic tooling.

4.6 Investigation Derived Waste

A total of 68 drums of IDW (14 drums of solid IDW, 43 drums of liquid IDW, and 11 drums containing a solid/liquid mixture) were generated during the October 2020 through June 2021 assessment events from decontamination activities, soil cuttings from drilling, drilling fluids, and monitoring well development and purge water. The drums were labelled and staged on asphalt at a location approved by FFSFC representatives. Field drum inventories and IDW analytical results are accessible on the FDEP Information Portal (FDEP, 2021b). Final IDW manifests are provided in **Appendix C**.

During the October 2020 assessment event, one composite solid sample and one composite aqueous sample was collected from IDW drums for waste characterization purposes. The composite samples were analyzed for volatile organic compounds (USEPA Method 8260D), semi-volatile organic compounds (USEPA Method 8270E), the 8 Resource Conservation and Recovery Act metals (USEPA Method 6020A and 7473), and PFAS (USEPA Method 8321B). The IDW analytical laboratory report was provided to Universal Environmental Solutions (UES) and Erwin Remediation for profiling and manifest completion. The 68 drums were removed for off-Site disposal by UES and Erwin Remediation at different times throughout the events, with the last of the drums removed on 17 June 2021.

5. CONCLUSIONS

During Site assessment activities, Geosyntec collected samples of Site media (soil and groundwater) for laboratory analysis of PFAS constituents. The concentrations of PFOA and PFOS in soil and groundwater were equated against provisional CTLs, and the results were evaluated to identify potential exposure pathways and/or potential PFAS sources. The results indicate the following:

- Soil concentrations of PFOS and/or PFOA are above the provisional L-SCTLs at multiple depth intervals at 30 soil sample locations in the former fire training facility operational area. The results indicate that PFOS and PFOA extend from the land surface down to the water table and could be leaching from soil to groundwater at concentrations above provisional GCTLs.
- Groundwater concentrations of PFOA, PFOS, and/or PFOA+PFOS in screen point samples are above provisional GCTLs in 23 of the 25 sample locations up to 90 ft BLS.
  - PFAS concentrations are highest within and adjacent to the warehouse sump area and target sump area.
  - Elevated PFAS concentrations are observed upgradient and side-gradient of the warehouse sump and target sump areas at the property boundaries across the Site.
- Groundwater concentrations of PFOA, PFOS, and/or PFOA+PFOS in monitoring wells are above provisional GCTLs in both the 20 to 45 ft BLS and 100 to 120 ft BLS depth intervals, as well as the Irrigation Well.
  - PFAS concentrations are highest within and adjacent to the warehouse sump area and target sump area.
  - Elevated PFAS concentrations are also observed upgradient of the warehouse sump area and target sump near the western property boundary.
  - The basal extent of the PFAS contamination has not been determined.

6. RECOMMENDATIONS

Geosyntec recommends the following:

- Additional soil sampling to delineate the overall extent of provisional L-STCL exceedances in soil; and
- Additional groundwater assessment, which may include DPT groundwater sampling and/or installation of additional monitoring wells, to delineate the horizontal and vertical extent of PFAS concentrations exceeding the provisional GCTL.

Following discussions with the FDEP, a Work Plan summarizing the proposed sampling activities will be submitted under a separate cover.

7. REFERENCES

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TABLES

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Location ID	Sample ID	Matrix	Depth (ft BLS)	Drilling Method	Analyses	Rationale	Criteria
Soil Samples							
SB-1	SB-1 (0-0.5')	Soil	0-0.5	HA	PFAS	Delineation Sampling	Provisional Soil Cleanup Target Levels
	SB-1 (0.5-2')		0.5-2				
	SB-1 (2-4')		2-4				
	SB-1 (4-6')		4-6	DPT			
	SB-1 (6-8')		6-8				
	SB-1 (10-12')		10-12				
	SB-1 (13-15')		13-15				
	SB-1 (23-25')		23-25				
	SB-1 (33-35')		33-35				
SB-2	SB-2 (0.5-2')		0.5-2	HA			
	SB-2 (2-4')		2-4				
	SB-2 (4-6')		4-6	DPT			
	SB-2 (6-8')		6-8				
	SB-2 (10-12')		10-12				
	SB-2 (13-15')		13-15				
	SB-2 (23-25')		23-25				
	SB-2 (28-30')		28-30				
SB-3	SB-3 (0.5-2')		0.5-2	HA			
	SB-3 (2-4')		2-4				
	SB-3 (4-6')		4-6	DPT			
	SB-3 (6-8')		6-8				
	SB-3 (10-12')		10-12				
	SB-3 (13-15')		13-15				
	SB-3 (23-25')		23-25				
	SB-3 (28-30')		28-30				
SB-4	SB-4 (0.5-2')		0.5-2	HA			
	SB-4 (2-4')		2-4				
	SB-4 (4-6')		4-6	DPT			
	SB-4 (6-8')		6-8				
	SB-4 (10-12')		10-12				
	SB-4 (13-15')		13-15				
	SB-4 (23-25')		23-25				
	SB-4 (30-32')		30-32				
SB-5	SB-5 (0-0.5')		0-0.5	HA			
	SB-5 (0.5-2')		0.5-2				
	SB-5 (2-4')		2-4				
	SB-5 (4-6')		4-6	DPT			
	SB-5 (6-8')		6-8				
	SB-5 (10-12')		10-12				
	SB-5 (13-15')		13-15				
	SB-5 (23-25')		23-25				
	SB-5 (28-30')		28-30				
SB-6	SB-6 (0-0.5')		0-0.5	HA			
	SB-6 (0.5-2')		0.5-2				
	SB-6 (2-4')		2-4				
	SB-6 (4-6')		4-6	DPT			
	SB-6 (6-8')		6-8				
	SB-6 (10-12')		10-12				
	SB-6 (13-15')		13-15				
	SB-6 (23-25')		23-25				
	SB-6 (28-30')		28-30				
SB-7	SB-7 (0.5-2')		0.5-2	HA			
	SB-7 (2-4')		2-4				
	SB-7 (4-6')		4-6	DPT			
	SB-7 (6-8')		6-8				
	SB-7 (10-12')		10-12				
	SB-7 (13-15')		13-15				
	SB-7 (23-25')		23-25				
	SB-7 (28-30')		28-30				
SB-8	SB-8 (0-0.5')		0-0.5	HA			
	SB-8 (0.5-2')		0.5-2				
	SB-8 (2-4')		2-4				
	SB-8 (4-6')		4-6				
SB-9	SB-9 (0-0.5')		0-0.5				
	SB-9 (0.5-2')		0.5-2				
	SB-9 (2-4')		2-4				
	SB-9 (4-6')		4-6				

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Former Florida State Fire College

Location ID	Sample ID	Matrix	Depth (ft BLS)	Drilling Method	Analyses	Rationale	Criteria
SB-10	SB-10 (0-0.5')	Soil	0-0.5	HA	PFAS	Delineation Sampling	Provisional Soil Cleanup Target Levels
	SB-10 (0.5-2')		0.5-2				
	SB-10 (2-4')		2-4				
	SB-10 (4-6')		4-6				
SB-11	SB-11 (0-0.5')		0-0.5				
	SB-11 (0.5-2')		0.5-2				
SB-12	SB-12 (0-0.5')		0-0.5				
	SB-12 (0.5-2')		0.5-2				
SB-13	SB-13 (0-0.5')		0-0.5				
	SB-13 (0.5-2')		0.5-2				
	SB-13 (2-4')		2-4				
SB-14	SB-14 (0.5-2')		0.5-2				
	SB-14 (2-4')		2-4				
SB-15	SB-15 (0.5-2')		0.5-2				
	SB-15 (2-4')		2-4				
SB-16	SB-16 (0-0.5')		0-0.5				
	SB-16 (0.5-2')		0.5-2				
	SB-16 (2-4')		2-4				
SB-17	SB-17 (0-0.5')		0-0.5				
	SB-17 (0.5-2')		0.5-2				
	SB-17 (2-4')		2-4				
SB-18	SB-18 (0-0.5')		0-0.5				
	SB-18 (0.5-2')		0.5-2				
	SB-18 (2-4')		2-4				
SB-19	SB-19 (0-0.5')		0-0.5				
	SB-19 (0.5-2')		0.5-2				
	SB-19 (2-4')		2-4				
SB-20	SB-20 (0-0.5')		0-0.5				
	SB-20 (0.5-2')		0.5-2				
	SB-20 (2-4')		2-4				
SB-21	SB-21 (0-0.5')		0-0.5				
	SB-21 (0.5-2')		0.5-2				
	SB-21 (2-4')		2-4				
SB-22	SB-22 (0-0.5')		0-0.5				
	SB-22 (0.5-2')		0.5-2				
	SB-22 (2-4')		2-4				
SB-23	SB-23 (0-0.5')		0-0.5				
	SB-23 (0.5-2')		0.5-2				
	SB-23 (2-4')		2-4				
SB-24	SB-24 (0-0.5')		0-0.5				
	SB-24 (0.5-2')		0.5-2				
	SB-24 (2-4')		2-4				
SB-25	SB-25 (0-0.5')		0-0.5				
	SB-25 (0.5-2')		0.5-2				
SB-26	SB-26 (0-0.5')		0-0.5				
	SB-26 (0.5-2')		0.5-2				
SB-27	SB-27 (0-0.5')		0-0.5				
	SB-27 (0.5-2')		0.5-2				
	SB-27 (2-3')		2-3				
	SB-27 (4-6')		4-6				
SB-28	SB-28 (0.5-2')		0.5-2				
	SB-28 (2-4')		2-4				
SB-29	SB-29 (0.5-2')		0.5-2				
	SB-29 (2-4')		2-4				
SB-30	SB-30 (0.5-2')		0.5-2				
	SB-30 (2-4')		2-4				
SB-31	SB-31 (0-0.5')		0-0.5				
	SB-31 (0.5-2')		0.5-2				
	SB-31 (2-4')		2-4				
SB-32	SB-32 (0-0.5')		0-0.5				
	SB-32 (0.5-2')		0.5-2				
	SB-32 (2-4')		2-4				
SB-33	SB-33 (0-0.5')		0-0.5				
	SB-33 (0.5-2')		0.5-2				
	SB-33 (2-4')		2-4				
SB-34	SB-34 (0.5-2')		0.5-2				
	SB-34 (2-4')		2-4				
SB-35	SB-35 (0.5-2')		0.5-2				
	SB-35 (2-3')		2-3				

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Location ID	Sample ID	Matrix	Depth (ft BLS)	Drilling Method	Analyses	Rationale	Criteria
SB-36	SB-36 (0.5-2')	Soil	0.5-2	HA	PFAS	Delineation Sampling	Provisional Soil Cleanup Target Levels
	SB-36 (2-4')		2-4				
SB-37	SB-37 (0-0.5')		0-0.5				
	SB-37 (0.5-2')		0.5-2				
	SB-37 (2-4')		2-4				
	SB-37 (4-6')		4-6				
SB-38	SB-38 (0-0.5')		0-0.5				
	SB-38 (0.5-2')		0.5-2				
SB-39	SB-39 (0-0.5')		0-0.5				
	SB-39 (0.5-2')		0.5-2				
	SB-39 (2-4')		2-4				
SB-40	SB-40 (0.5-2')		0.5-2				
	SB-40 (2-4')		2-4				
SB-41	SB-41 (0-0.5')		0-0.5				
	SB-41 (0.5-2')		0.5-2				
	SB-41 (2-4')		2-4				
SB-42	SB-42 (0-0.5')		0-0.5				
	SB-42 (0.5-2')		0.5-2				
	SB-42 (2-4')		2-4				
	SB-42 (4-6')		4-6				
SB-43	SB-43 (0-0.5')		0-0.5				
	SB-43 (0.5-2')		0.5-2				
	SB-43 (2-4')		2-4				
	SB-43 (4-6')		4-6				
SB-44	SB-44 (0-0.5')		0-0.5				
	SB-44 (0.5-2')		0.5-2				
	SB-44 (2-4')		2-4				
	SB-44 (4-6')		4-6				
SB-45	SB-45 (0-0.5')		0-0.5				
	SB-45 (0.5-2')		0.5-2				
	SB-45 (2-4')		2-4				
	SB-45 (4-6')		4-6				
	SB-45 (6-8')		6-8	DPT			
	SB-45 (10-12')		10-12				
	SB-45 (13-15')		13-15				
	SB-45 (23-25')		23-25				
	SB-45 (28-30')		28-30				
SB-46	SB-46 (0.5-2')		0.5-2	HA			
	SB-46 (2-4')		2-4				
SB-47	SB-47 (0.5-2')		0.5-2				
	SB-47 (2-4')		2-4				
SB-48	SB-48 (0-0.5')		0-0.5				
	SB-48 (0.5-2')		0.5-2				
	SB-48 (2-3')		2-3				
	SB-48 (4-6')		4-6				
SB-49	SB-49 (0-0.5')		0-0.5				
	SB-49 (0.5-2')		0.5-2				
SB-50	SB-50 (0.5-2')		0.5-2				
	SB-50 (2-4')		2-4				
SB-51	SB-51 (0.5-2')		0.5-2				
	SB-51 (2-4')		2-4				
SB-52	SB-52 (0.5-2')		0.5-2				
	SB-52 (2-4')		2-4				
SB-53	SB-53 (0-0.5')		0-0.5				
	SB-53 (0.5-2')		0.5-2				
SB-54	SB-54 (0-0.5')		0-0.5				
	SB-54 (0.5-2')		0.5-2				
	SB-54 (2-4')		2-4				
SB-55	SB-55 (0-0.5')		0-0.5				
	SB-55 (0.5-2')		0.5-2				
	SB-55 (2-4')		2-4				
SB-56	SB-56 (0-0.5')		0-0.5				
	SB-56 (0.5-2')		0.5-2				
	SB-56 (2-4')		2-4				
SB-57	SB-57 (0-0.5')		0-0.5				
	SB-57 (0.5-2')		0.5-2				
	SB-57 (2-4')		2-4				
	SB-57 (4-6')		4-6				

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Location ID	Sample ID	Matrix	Depth (ft BLS)	Drilling Method	Analyses	Rationale	Criteria
SB-58	SB-58 (0-0.5')	Soil	0-0.5	HA	PFAS	Delineation Sampling	Provisional Soil Cleanup Target Levels
	SB-58 (0.5-2')		0.5-2				
	SB-58 (2-4')		2-4				
	SB-58 (4-6')		4-6				
SB-59	SB-59 (0-0.5')		0-0.5				
	SB-59 (0.5-2')		0.5-2				
	SB-59 (2-4')		2-4				
	SB-59 (4-6')		4-6				
SB-60	SB-60 (0-0.5')		0-0.5				
	SB-60 (0.5-2')		0.5-2				
	SB-60 (2-4')		2-4				
	SB-60 (4-6')		4-6				
SB-61	SB-61 (0-0.5')		0-0.5				
	SB-61 (0.5-2')		0.5-2				
	SB-61 (2-4')		2-4				
	SB-61 (4-6')		4-6				
	SB-61 (6-8')		6-8	DPT			
	SB-61 (10-12')		10-12				
	SB-61 (13-15')		13-15				
	SB-61 (23-25')		23-25				
	SB-61 (28-30')		28-30				
SB-62	SB-62 (0-0.5')		0-0.5	HA			
	SB-62 (0.5-2')		0.5-2				
	SB-62 (2-4')		2-4				
	SB-62 (4-6')		4-6				
SB-63	SB-63 (0-0.5')		0-0.5				
	SB-63 (0.5-2')		0.5-2				
	SB-63 (2-4')		2-4				
	SB-63 (4-6')		4-6				
	SB-63 (6-8')		6-8	DPT			
	SB-63 (10-12')		10-12				
	SB-63 (13-15')		13-15				
	SB-63 (23-25')		23-25				
	SB-63 (33-35')		33-35				
SB-64	SB-64 (0-0.5')		0-0.5	HA			
	SB-64 (0.5-2')		0.5-2				
	SB-64 (2-4')		2-4				
	SB-64 (4-6')		4-6				
SB-65	SB-65 (0-0.5')		0-0.5				
	SB-65 (0.5-2')		0.5-2				
SB-66	SB-66 (0-0.5')		0-0.5				
	SB-66 (0.5-2')		0.5-2				
	SB-66 (2-4')		2-4				
	SB-66 (4-6')		4-6				
SB-67	SB-67 (0-0.5')		0-0.5				
	SB-67 (0.5-2')		0.5-2				
	SB-67 (2-4')		2-4				
	SB-67 (4-6')		4-6				
SB-68	SB-68 (0-0.5')		0-0.5				
	SB-68 (0.5-2')		0.5-2				
	SB-68 (2-4')		2-4				
	SB-68 (4-6')		4-6				
	SB-68 (6-8')		6-8	DPT			
	SB-68 (10-12')		10-12				
	SB-68 (13-15')		13-15				
	SB-68 (23-25')		23-25				
	SB-68 (32-34')		32-34				
SB-69	SB-69 (0-0.5')		0-0.5	HA			
	SB-69 (0.5-2')		0.5-2				
	SB-69 (2-4')		2-4				
	SB-69 (4-6')		4-6				
SB-70	SB-70 (0-0.5')		0-0.5				
	SB-70 (0.5-2')		0.5-2				
	SB-70 (2-4')		2-4				
	SB-70 (4-6')		4-6				
SB-71	SB-71 (0-0.5')		0-0.5				
	SB-71 (0.5-2')		0.5-2				
	SB-71 (2-4')		2-4				
	SB-71 (4-6')		4-6				

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Location ID	Sample ID	Matrix	Depth (ft BLS)	Drilling Method	Analyses	Rationale	Criteria
SB-72	SB-72 (0-0.5')	Soil	0-0.5	HA	PFAS	Delineation Sampling	Provisional Groundwater Cleanup Target Levels
	SB-72 (0.5-2')		0.5-2				
	SB-72 (2-4')		2-4				
	SB-72 (4-6')		4-6				
	SB-72 (6-8')		6-8	DPT			
	SB-72 (10-12')		10-12				
	SB-72 (13-15')		13-15				
	SB-72 (23-25')		23-25				
	SB-72 (33-35')		33-35				
SB-73	SB-73 (0-0.5')		0-0.5	HA			
	SB-73 (0.5-2')		0.5-2				
	SB-73 (2-4')		2-4				
	SB-73 (4-6')		4-6				
SB-74	SB-74 (0-0.5')		0-0.5				
	SB-74 (0.5-2')		0.5-2				
	SB-74 (2-4')		2-4				
	SB-74 (4-6')		4-6				

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Location ID	Sample ID	Matrix	Depth (ft BLS)	Drilling Method	Analyses	Rationale	Criteria
Screen Point Groundwater Samples							
SP-1	SP-1 (36-40')	Groundwater	36-40	DPT	PFAS	Groundwater Assessment	Provisional Groundwater Cleanup Target Levels
SP-2	SP-2 (32-36')		32-36				
	SP-2 (46-50')		46-50				
	SP-2 (46-50') DUP		46-50				
	SP-2 (66-70')		66-70				
	SP-2 (86-90')		86-90				
SP-3	SP-3 (31-35')		31-35				
	SP-3 (31-35') DUP		31-35				
	SP-3 (46-50')		46-50				
	SP-3 (66-70')		66-70				
	SP-3 (66-70') DUP		66-70				
	SP-3 (86-90')		86-90				
SP-4	SP-4 (33-37')		33-37				
SP-5	SP-5 (31-35')		31-35				
	SP-5 (46-50')		46-50				
	SP-5 (66-70')		66-70				
	SP-5 (82-86')		82-86				
	SP-5 (82-86') DUP		82-86				
SP-6	SP-6 (31-35')		31-35				
SP-7	SP-7 (31-35')		31-35				
SP-8	SP-8 (32-36')		32-36				
	SP-8 (46-50')		46-50				
	SP-8 (66-70')		66-70				
	SP-8 (86-90')		86-90				
SP-9	SP-9 (31-35')		31-35				
	SP-9 (31-35') DUP		31-35				
	SP-9 (46-50')		46-50				
	SP-9 (61-65')		61-65				
SP-10	SP-10 (36-40')		36-40				
	SP-10 (46-50')		46-50				
	SP-10 (66-70')		66-70				
	SP-10 (86-90')		86-90				
SP-11	SP-11 (31-35')		31-35				
	SP-11 (46-50')		46-50				
	SP-11 (66-70')		66-70				
	SP-11 (81-85')		81-85				
SP-12	SP-12 (36-40')		36-40				
	SP-12 (36-40') DUP		36-40				
	SP-12 (46-50')		46-50				
	SP-12 (66-70')		66-70				
SP-13	SP-13 (46-50')		46-50				
	SP-13 (66-70')		66-70				
SP-14	SP-14 (36-40')		36-40				
	SP-14 (46-50')		46-50				
	SP-14 (46-50') DUP		46-50				
	SP-14 (66-70')		66-70				
	SP-14 (86-90')		86-90				
SP-15	SP-15 (41-45')		41-45				
	SP-15 (46-50')		46-50				
	SP-15 (46-50') DUP		46-50				
	SP-15 (66-70')		66-70				
	SP-15 (86-90')		86-90				
SP-16	SP-16 (36-40')		36-40				
	SP-16 (46-50')		46-50				
	SP-16 (66-70')		66-70				
	SP-16 (78-82')		78-82				
SP-17	SP-17 (36-40')		36-40				
	SP-17 (46-50')		46-50				
	SP-17 (66-70')		66-70				
	SP-17 (82-86')		82-86				
SP-18	SP-18 (36-40')		36-40				
	SP-18 (46-50')		46-50				
	SP-18 (66-70')		66-70				
	SP-18 (82-86')		82-86				

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Location ID	Sample ID	Matrix	Depth (ft BLS)	Drilling Method	Analyses	Rationale	Criteria
SP-19	SP-19 (35-39')	Groundwater	35-39	DPT	PFAS	Groundwater Assessment	Provisional Groundwater Cleanup Target Levels
	SP-19 (46-50')		46-50				
	SP-19 (66-70')		66-70				
	SP-19 (86-90')		86-90				
SP-20	SP-20 (36-40')		36-40				
	SP-20 (46-50')		46-50				
	SP-20 (66-70')		66-70				
	SP-20 (86-90')		86-90				
SP-21	SP-21 (36-40')		36-40				
	SP-21 (46-50')		46-50				
	SP-21 (66-70')		66-70				
	SP-21 (86-90')		86-90				
SP-22	SP-22 (36-40')		36-40				
	SP-22 (46-50')		46-50				
	SP-22 (66-70')		66-70				
	SP-22 (86-90')		86-90				
	SP-22 (86-90') DUP		86-90				
SP-23	SP-23 (36-40')		36-40				
	SP-23 (46-50')		46-50				
	SP-23 (66-70')		66-70				
	SP-23 (66-70') DUP		66-70				
	SP-23 (78-82')		78-82				
SP-24	SP-24 (36-40')		36-40				
	SP-24 (46-50')		46-50				
	SP-24 (66-70')		66-70				
	SP-24 (78-82')		78-82				
SP-25	SP-25 (36-40')		36-40				
	SP-25 (46-50')		46-50				
	SP-25 (66-70')		66-70				
Monitoring Well Groundwater Samples							
DEPMW-1	DEPMW-1 (100-120')	Groundwater	100-120	Submersible Pump	PFAS	Groundwater Assessment	Provisional Groundwater Cleanup Target Levels
DEPMW-2	DEPMW-2 (25-45')		25-45				
DEPMW-3	DEPMW-3 (100-120')		100-120				
DEPMW-4	DEPMW-4 (25-45')		25-45				
DEPMW-5	DEPMW-5 (100-120')		100-120				
DEPMW-6	DEPMW-6 (25-45')		25-45				
DEPMW-7	DEPMW-7 (100-120')		100-120				
DEPMW-8	DEPMW-8 (20-40')		20-40				
	DEPMW-8 (20-40') DUP		20-40				
VISAMW (M-200)	VISAMW (M-200)		30-40				
Irrigation Well	Irrigation Well		105-140	Grab			

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Location ID	Sample ID	Matrix	Depth (ft BLS)	Drilling Method	Analyses	Rationale	Criteria
Laboratory Quality Assurance/Quality Control Samples							
Sample Type	**Sample ID**	**Matrix**	**Equipment sampled**		**Analyses**	**Rationale**	**Criteria**
Equipment Blanks (ratio of 1:10)	EQB-1	Water	DPT Groundwater Sampling Equipment		PFAS	Assess potential sources of contamination from sampling equipment	N/A
	EQB-2		Soil Sampling Equipment - Hand Auger				
	EQB-3						
	EQB-4						
	EQB-5						
	EQB-6						
	EQB-7						
	EQB-8						
	EQB-9						
	EQB-10						
	EQB-11						
	EQB-12						
	EQB-13						
	EQB-14						
	EQB-15						
	EQB-16						
	EQB-17		Soil Sampling Equipment - DPT				
	EQB-18						
	EQB-19						
	EQB-20						
	EQB-21		DPT Groundwater Sampling Equipment				
	EQB-22						
	EQB-23						
	EQB-24						
	EQB-25						
	EQB-26						
	EQB-27						
	EQB-28						
	EQB-29		Soil Sampling Equipment - Hand Auger				
	EQB-30						
	EQB-31						
	EQB-32						
	EQB-33						
	EQB-34						
	EQB-35						
	EQB-36						
	EQB-37		Soil Sampling Equipment - DPT				
	EQB-38						
	EQB-39						
	EQB-40		MW Installation Equipment				
	EQB-41						
	EQB-42		Submersible Pump				
	EQB-43		K-Packer				
Field Reagent Blanks (1 per cooler)	FRB-1		DPT Groundwater Sampling				
	FRB-2		Decontamination				
	FRB-3		HA Decon Area				
	FRB-4		DPT Groundwater Sampling				
	FRB-5		Groundwater Sampling				
	FRB-6		Hand Auger and DPT Decontamination				
	FRB-7		Monitoring Well Decon				

TABLE 1: SAMPLING LOCATIONS, MATRICES, ANALYTES, RATIONALE, AND CRITERIA
Former Florida State Fire College

Location ID	Sample ID	Matrix	Depth (ft BLS)	Drilling Method	Analyses	Rationale	Criteria
IDW Samples							
Drum Number	**Sample ID**	**Matrix**	**IDW Source**		**Analysis**	**Rationale**	**Criteria**
4	IDW-Soil-20201014	Soil	Soil cuttings		PFAS, VOCs, SVOCs, 8 RCRA Metals	Waste characterization	N/A
5	IDW-Water-20201014	Water	Decontamination and purge water				

Notes:

1. DPT indicates direct push technology.
2. ft BLS indicates feet below land surface.
3. SB indicates soil boring.
4. HA indicates hand auger.
5. PFAS indicates per- and polyfluoroalkyl substances.
6. N/A indicates not applicable.
7. EQB indicates equipment blank.
8. SP indicates screen point.
9. FRB indicates field reagent blank.
10. IDW indicates investigation derived waste.
11. VOC indicates volatile organic compounds.
12. SVOC indicates semi-volatile organic compounds.
13. 8 RCRA indicates Resource Conservation and Recovery Act metals arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver.
14. EQB-43 was collected on a K-packer to determine whether this equipment is suitable for assessing these analytes.

TABLE 2: SOIL ANALYTICAL RESULTS FOR PFAS COMPOUNDS

Former Florida State Fire College

Sample Location	Sample ID	Sample Date	Sample Interval (ft BLS)	PFOS	PFOA	PFBS	PFDA	PFDoA	PFHpA	PFHxS	PFHxA	PFNA	PFTeA	PFTriA	PFUnA	NMeFOSAA	NEtFOSAA	PFDS	PFHpS	PFNS	PFPeA	PFPeS	4:2 FTS	6:2 FTS	8:2 FTS
Provisional Residential SCTL				**1,300**	**1,300**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Provisional Industrial SCTL				**25,000**	**25,000**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Provisional Leachability SCTL				**7**	**2**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-1	SB-1 (0-0.5')	10/14/2020	0-0.5	3.8	0.23 I	0.099 U	0.39 U	0.20 U	0.20 U	0.27 I	0.20 U	0.21 I	0.20 U	0.20 U	0.57 I	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.41 I	0.099 U	0.20 U	0.39 U	0.20 U
	SB-1 (0.5-2')	10/14/2020	0.5-2	**8.3**	0.20 I	0.10 U	0.42 U	0.21 U	0.22 I	0.41 I	0.21 U	0.23 I	0.21 U	0.21 U	0.28 I	0.10 U	0.10 U	0.25 I	0.10 U	0.12 I	0.34 I	0.10 U	0.21 U	0.42 U	0.22 I
	SB-1 (2-4')	10/14/2020	2-4	**22**	0.12 I	0.097 U	0.44 I	0.19 U	0.19 U	0.35 I	0.19 U	0.49 I	0.19 U	0.19 U	0.19 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.19 U	0.097 U	0.19 U	0.39 U	0.19 U
	SB-1 (4-6')	10/14/2020	4-6	**8.0**	0.31 I	0.10 U	0.41 U	0.21 U	0.21 U	0.60	0.21 U	0.82 I	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.46 I	0.21 U
	SB-1 (6-8')	10/14/2020	6-8	1.9	0.13 I	0.098 U	0.39 U	0.20 U	0.20 U	0.37 I	0.20 U	0.25 I	0.20 U	0.20 U	0.20 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.20 U	0.098 U	0.20 U	0.49 I	0.20 U
	SB-1 (10-12')	10/14/2020	10-12	1.9	0.11 I	0.097 U	0.39 U	0.19 U	0.19 U	0.43	0.19 U	0.31 I	0.19 U	0.19 U	0.19 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.19 U	0.097 U	0.19 U	0.39 U	0.19 U
	SB-1 (13-15')	10/14/2020	13-15	0.64 I	0.10 U	0.10 U	0.42 U	0.21 U	0.21 U	0.20 I	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.42 U	0.21 U
	SB-1 (23-25')	10/14/2020	23-25	**11**	0.15 I	0.11 U	0.43 U	0.21 U	0.21 U	0.14 I	0.21 U	0.42 I	0.21 U	0.21 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.11 U	0.21 U	0.43 U	0.21 U
	SB-1 (33-35')	10/14/2020	33-35	3.1	0.16 U	0.16 U	0.65 U	0.32 U	0.32 U	0.16 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.32 U	0.16 U	0.32 U	0.83 I	0.32 U
SB-2	SB-2 (0.5-2')	10/12/2020	0.5-2	**23**	**3.3**	0.49	1.5 I	0.20 U	5.8	14	4.8	1.6	0.20 U	0.20 U	0.27 I	0.099 U	0.099 U	0.11 I	0.33 I	0.25 I	6.5	0.46	0.20 U	2.2	40
	SB-2 (2-4')	10/12/2020	2-4	**42**	**2.8**	0.43	0.57 I	0.20 U	5.8	5.5	4.7	2.7	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.24 I	4.4	0.60	0.20 U	3.0	250
	SB-2 (4-6')	10/12/2020	4-6	**120**	1.9	0.21 I	0.39 U	0.19 U	2.7	2.7	1.9	2.3	0.19 U	0.19 U	0.19 U	0.097 U	0.097 U	0.097 U	0.15 I	0.097 U	2.7	0.53	0.19 U	2.8	92
	SB-2 (6-8')	10/12/2020	6-8	**180**	**2.8**	0.18 I	0.38 U	0.19 U	2.5	4.4	2.3	4.6	0.19 U	0.19 U	0.19 U	0.094 U	0.094 U	0.094 U	0.76	0.13 I	2.2	0.64	0.19 U	11	65
	SB-2 (10-12')	10/12/2020	10-12	**150**	1.3	0.26 I	0.54 I	0.20 U	1.7	2.7	1.7	1.3	0.20 U	0.20 U	0.20 U	0.098 U	0.098 U	0.098 U	0.30 I	0.098 U	3.6	0.28 I	0.20 U	6.3	79
	SB-2 (13-15')	10/12/2020	13-15	**70**	0.099 U	0.099 U	0.40 U	0.20 U	0.20 U	0.18 I	0.20 U	0.83	0.20 U	0.20 U	0.20 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.20 U	0.099 U	0.20 U	0.40 U	120
	SB-2 (23-25')	10/12/2020	23-25	**21**	**5.5**	0.23 I	4.4	0.35 I	12	3.1	7.4	5.8	0.30 U	0.30 U	0.30 U	0.15 U	0.15 U	0.36 I	0.20 I	0.29 I	7.1	0.22 I	0.30 U	4.0	140
	SB-2 (28-30')	10/12/2020	28-30	**18**	0.21 I	0.14 U	0.55 U	0.28 U	0.28 U	0.31 I	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.28 U	0.14 U	0.28 U	1.1 I	17
SB-3	SB-3 (0.5-2')	10/13/2020	0.5-2	**47**	**17**	0.90	1.5 I	0.54 I	40	35	26	3.0	0.21 U	0.21 U	1.1	0.11 U	0.11 U	0.35 I	0.77	0.23 I	29	1.4	0.21 U	0.69 I	6.9
	SB-3 (2-4')	10/13/2020	2-4	4.4	0.90	0.21 I	0.51 I	0.20 U	2.4	3.2	3.4	0.21 I	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	6.4	0.20 I	0.20 U	0.40 U	0.32 I
	SB-3 (4-6')	10/13/2020	4-6	**36**	**3.3**	0.39 I	1.1 I	0.20 U	4.6	11	6.0	2.1	0.20 U	0.20 U	0.25 I	0.10 U	0.10 U	0.19 I	0.22 I	0.25 I	8.8	0.56	0.20 U	1.0 I	8.0
	SB-3 (6-8')	10/13/2020	6-8	**8.9**	0.81	0.12 I	0.41 U	0.20 U	1.2	2.3	1.1	0.42 I	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	1.9	0.16 I	0.20 U	0.41 U	2.7
	SB-3 (10-12')	10/13/2020	10-12	**110**	**4.4**	0.29 I	0.50 U	0.25 U	4.1	13	3.5	3.3	0.25 U	0.25 U	0.25 U	0.12 U	0.12 U	0.12 U	0.30 I	0.12 U	1.9	0.59	0.25 U	3.4	37
	SB-3 (13-15')	10/13/2020	13-15	**69**	**3.1**	0.13 I	0.45 U	0.22 U	2.1	7.5	1.8	2.0	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.18 I	0.11 U	0.90 I	0.28 I	0.22 U	0.51 I	11
	SB-3 (23-25')	10/13/2020	23-25	**22**	1.5	0.12 U	0.48 U	0.24 UJ	1.1	2.2	0.30 I	1.5	0.24 U	0.24 U	0.24 U	0.12 U	0.12 U	0.12 U	0.17 I	0.12 U	0.33 I	0.12 U	0.24 U	0.48 U	5.1
	SB-3 (28-30')	10/13/2020	28-30	**68**	1.5	0.12 U	0.47 U	0.23 U	0.64 I	1.4	0.23 U	2.9	0.23 U	0.23 U	0.23 U	0.12 U	0.12 U	0.12 U	0.26 I	0.12 U	0.32 I	0.12 U	0.23 U	0.47 U	15
SB-4	SB-4 (0.5-2')	10/12/2020	0.5-2	7.4	2.4	0.095 U	0.38 U	0.19 U	5.3	6.3	2.7	1.7	0.19 U	0.19 U	0.39 I	0.095 U	0.095 U	0.095 U	0.13 I	0.095 U	2.8	0.28 I	0.19 U	0.38 U	0.68 I
	SB-4 (2-4')	10/12/2020	2-4	2.9	0.33 I	0.10 U	0.41 U	0.20 U	0.64 I	1.2	1.2	0.58 I	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	1.1	0.13 I	0.20 U	0.41 U	0.29 I
	SB-4 (4-6')	10/12/2020	4-6	0.83 I	0.10 U	0.10 U	0.42 U	0.21 U	0.21 U	0.25 I	1.1	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.68 I	0.10 U	0.21 U	0.42 U	0.21 U
	SB-4 (6-8')	10/12/2020	6-8	0.66 I	0.094 U	0.094 U	0.37 U	0.19 U	0.30 I	0.094 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.19 U	0.094 U	0.19 U	0.37 U	0.19 U
	SB-4 (10-12')	10/12/2020	10-12	0.52 I	0.13 U	0.13 U	0.51 U	0.25 U	0.25 U	0.13 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.25 U	0.13 U	0.25 U	0.51 U	0.25 U
	SB-4 (13-15')	10/12/2020	13-15	0.62 I	0.14 U	0.14 U	0.56 U	0.28 U	0.28 U	0.14 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.28 U	0.14 U	0.28 U	0.56 U	0.28 U
	SB-4 (23-25')	10/12/2020	23-25	0.30 U	0.15 U	0.15 U	0.60 U	0.30 U	0.30 U	0.15 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.30 U	0.15 U	0.30 U	0.60 U	0.30 U
	SB-4 (30-32')	10/12/2020	30-32	0.44 I	0.13 U	0.13 U	0.51 U	0.26 U	0.26 U	0.13 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.26 U	0.13 U	0.26 U	0.51 U	0.26 U
SB-5	SB-5 (0-0.5')	10/13/2020	0-0.5	**14**	0.49 I	0.20 I	0.52 U	0.26 U	0.64 I	5.3	1.4	0.50 I	0.26 U	0.26 U	0.93 I	0.13 U	0.13 U	0.44 I	0.14 I	0.14 I	1.2	0.34 I	0.26 U	0.52 U	0.26 U
	SB-5 (0.5-2')	10/13/2020	0.5-2	**28**	1.0	0.24 I	0.60 U	0.30 U	1.0 I	6.5	2.4	0.64 I	0.30 U	0.30 U	0.30 U	0.15 U	0.15 U	0.15 U	0.64	0.15 U	1.8	0.34 I	0.30 U	0.60 U	0.30 U
	SB-5 (2-4')	10/13/2020	2-4	5.8	0.14 U	0.28 I	0.56 U	0.28 U	0.37 I	3.7	0.54 I	0.28 U	0.28 U	0.28 U	0.28 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.37 I	0.19 I	0.28 U	0.56 U	0.28 U
	SB-5 (4-6')	10/13/2020	4-6	2.2	0.17 I	0.25 I	0.48 U	0.24 U	0.28 I	2.8	0.29 I	0.24 U	0.24 U	0.24 U	0.24 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.24 U	0.23 I	0.24 U	0.48 U	0.24 U
	SB-5 (6-8')	10/13/2020	6-8	6.0	0.13 U	0.15 I	0.51 U	0.26 U	0.26 U	3.1	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.26 U	0.17 I	0.26 U	0.51 U	0.26 U
	SB-5 (10-12')	10/13/2020	10-12	4.1	0.11 U	0.11 U	0.46 U	0.23 U	0.23 U	0.78	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.23 U	0.11 U	0.23 U	0.46 U	0.23 U
	SB-5 (13-15')	10/13/2020	13-15	1.2	0.11 U	0.11 U	0.43 U	0.22 U	0.22 U	0.33 I	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.43 U	0.22 U
	SB-5 (23-25')	10/13/2020	23-25	**8.0**	0.12 U	0.12 U	0.46 U	0.23 U	0.23 U	0.62	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.12 U	0.12 U	0.40 I	0.12 U	0.12 U	0.23 U	0.12 U	0.23 U	0.46 U	0.23 U
	SB-5 (28-30')	10/13/2020	28-30	**250**	0.12 U	0.12 U	0.50 U	0.25 U	0.25 U	0.96	0.39 I	0.25 U	0.25 U	0.25 U	0.25 U	0.12 U	0.27 I	2.9	0.12 U	1.9	0.25 U	0.12 U	0.25 U	0.50 U	0.25 U
SB-6	SB-6 (0-0.5')	10/13/2020	0-0.5	2.9	0.17 I	0.11 U	0.43 U	0.21 U	0.21 U	0.13 I	0.36 I	0.21 U	0.21 U	0.21 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.23 I	0.11 U	0.21 U	0.43 U	0.21 U
	SB-6 (0.5-2')	10/13/2020	0.5-2	1.0	0.10 U	0.10 U	0.41 U	0.20 U	0.20 U	0.10 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.41 U	0.20 U
	SB-6 (2-4')	10/13/2020	2-4	0.60 I	0.10 U	0.10 U	0.42 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.42 U	0.21 U
	SB-6 (4-6')	10/13/2020	4-6	0.97	0.11 U	0.11 U	0.46 U	0.23 U	0.23 U	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.23 U	0.11 U	0.23 U	0.46 U	0.23 U
	SB-6 (6-8')	10/13/2020	6-8	0.46 I	0.11 U	0.11 U	0.45 U	0.22 U	0.22 U	0.11 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.45 U	0.22 U
	SB-6 (10-12')	10/13/2020	10-12	0.25 I	0.12 U	0.12 U	0.49 U	0.24 U	0.24 U	0.12 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.12 UJ	0.12 U	0.12 U	0.12 U	0.12 U	0.24 U	0.12 U	0.24 U	0.49 U	0.24 U
	SB-6 (13-15')	10/13/2020	13-15	0.23 U	0.12 U	0.12 U	0.46 U	0.23 U	0.23 U	0.12 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.23 U	0.12 U	0.23 U	0.46 U	0.23 U
	SB-6 (23-25')	10/13/2020	23-25	0.28 U	0.14 U	0.14 U	0.56 U	0.28 U	0.28 U	0.14 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.28 U	0.14 U	0.28 U	0.56 U	0.28 U
	SB-6 (28-30')	10/13/2020	28-30	0.59 I	0.15 U	0.15 U	0.61 U	0.30 U	0.30 U	0.15 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.30 U	0.15 U	0.30 U	0.61 U	0.30 U
SB-7	SB-7 (0.5-2')	10/13/2020	0.5-2	6.3	0.10 U	0.10 U	0.40 U	0.20 U	0.34 I	0.28 I	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.40 U	0.20 U
	SB-7 (2-4')	10/13/2020	2-4	4.9	0.17 I	0.10 U	0.42 U	0.21 U	0.34 I	0.18 I	0.65 I	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.67 I	0.10 U	0.21 U	0.42 U	0.21 U
	SB-7 (4-6')	10/14/2020	4-6	3.2	0.98	0.14 U	0.57 U	0.28 U	0.78 I	0.22 I	1.1 I	0.33 I	0.28 U	0.28 U	0.28 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	1.2	0.14 U	0.28 U	0.57 U	0.28 U
	SB-7 (6-8')	10/14/2020	6-8	1.4	0.41 I	0.15 U	0.58 U	0.29 U	0.52 I	0.23 I	0.76 I	0.29 U	0.29 U	0.29 U	0.29 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.75 I	0.15 U	0.29 U	0.58 U	0.29 U
	SB-7 (10-12')	10/14/2020	10-12	0.34 I	0.31 I	0.13 U	0.52 U	0.26 U	0.52 I	0.15 I	0.54 I	0.26 U	0.26 U	0.26 U	0.26 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.56 I	0.13 U	0.26 U	0.52 U	0.26 U
	SB-7 (13-15')	10/14/2020	13-15	0.27 U	0.13 U	0.13 U	0.53 U	0.27 U	0.27 U	0.13 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.27 U	0.13 U	0.27 U	0.53 U	0.27 U
	SB-7 (23-25')	10/14/2020	23-25	0.61 I	0.12 U	0.12 U	0.48 U	0.24 U	0.24 U	0.12 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.24 U	0.12 U	0.24 U	0.48 U	0.24 U
	SB-7 (28-30')	10/14/2020	28-30	2.3	0.12 U	0.12 U	0.47 U	0.23 U	0.23 U	0.20 I	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.23 U	0.12 U	0.23 U	0.47 U	0.23 U
SB-8	SB-8 (0-0.5')	10/15/2020	0-0.5	2.8	0.20 I	0.10 U	0.40 U	0.20 U	0.20 U	0.29 I	0.20 U	0.20 U	0.20 U	0.20 U	0.29 I	0.10 U	0.10 U	0.14 I	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.40 I	0.20 U
	SB-8 (0.5-2')	10/15/2020	0.5-2	1.7	0.098 U	0.098 U	0.39 U	0.20 U	0.20 U	0.098 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.20 U	0.098 U	0.20 U	0.44 I	0.20 U
	SB-8 (2-4')	3/23/2021	2-4	0.20 U	0.20 U	0.098 U	0.39 U	0.20 U	0.20 U	0.098 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.20 U	0.098 U	0.20 U	0.39 U	0.20 U
	SB-8 (4-6')	3/23/2021	4-6	0.20 I	0.19 U	0.095 U	0.38 U	0.19 U	0.19 U	0.095 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.19 U	0.095 U	0.19 U	0.38 U	0.19 U
SB-9	SB-9 (0-0.5')	10/13/2020	0-0.5	1.3	0.16 I	0.10 U	0.42 U	0.22 I	0.21 U	0.20 I	0.21 U	0.21 U	0.21 U	0.21 U	0.25 I	0.10 U	0.10 U	0.26 I	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.42 U	0.21 U
	SB-9 (0.5-2')	10/13/2020	0.5-2	**11**	0.49	0.11 U	0.42 U	0.21 U	0.30 I	0.32 I	0.28 I	0.21 U	0.21 U	0.28 I	1.6	0.11 U	0.11 U	0.82	0.11 U	0.11 U	0.23 I	0.11 U	0.21 U	1.9	4.6
	SB-9 (2-4')	3/23/2021	2-4	3.1	0.20 U	0.099 U	0.40 U	0.28 I	0.20 U	2.7	0.22 I	0.20 U	0.20 U	0.28 I	1.9	0.099 U	0.099 U	4.5	0.099 U	0.10 I	0.20 U	0.099 U	0.20 U	0.40 U	0.20 U
	SB-9 (4-6')	3/23/2021	4-6	1.1	0.21 U	0.11 U	0.42 U	0.21 U	0.21 U	1.7	0.21 U	0.21 U	0.21 U	0.21 U	0.70 I	0.11 U	0.11 U	0.64	0.11 U	0.14 I	0.21 U	0.11 U	0.21 U	0.42 U	0.21 U
SB-10	SB-10 (0-0.5')	10/14/2020	0-0.5	1.5	0.12 I	0.10 U	0.41 U	0.43 I	0.20 U	0.12 I	0.20 U	0.20 U	0.20 U	0.28 I	0.31 I	0.10 U	0.10 U	0.26 I	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.41 I	0.20 U
	SB-10 (0.5-2')	10/14/2020	0.5-2	0.20 U	0.10 U	0.10 U	0.40 U	0.20 U	0.20 U	0.10 U	0.20 U	0.20 U	0.20 U	0.20 U	0.30 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.40 U	0.20 U
	SB-10 (2-4')	3/23/2021	2-4	0.46 I	0.22 U	0.11 U	0.43 U	0.22 U	0.22 U	0.11 U	0.22 U	0.22 U	0.22 U	0.22 U	0.67 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.43 U	0.22 U

TABLE 2: SOIL ANALYTICAL RESULTS FOR PFAS COMPOUNDS
Former Florida State Fire College

Sample Location	Sample ID	Sample Date	Sample Interval (ft BLS)	PFOS	PFOA	PFBS	PFDA	PFDoA	PFHpA	PFHxS	PFHxA	PFNA	PFTeA	PFTriA	PFUnA	NMeFOSAA	NEtFOSAA	PFDS	PFHpS	PFNS	PFPeA	PFPeS	4:2 FTS	6:2 FTS	8:2 FTS
			Provisional Residential SCTL	**1,300**	**1,300**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Industrial SCTL	**25,000**	**25,000**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			Provisional Leachability SCTL	**7**	**2**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-10	SB-10 (4-6')	3/23/2021	4-6	0.22 I	0.22 U	0.11 U	0.44 U	0.22 U	0.22 U	0.11 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.44 U	0.22 U
SB-11	SB-11 (0-0.5')	10/14/2020	0-0.5	1.6	0.13 I	0.11 U	0.43 U	0.22 U	0.22 U	0.20 I	0.22 U	0.22 U	0.22 U	0.22 U	0.27 I	0.11 U	0.11 U	0.11 I	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.49 I	0.22 U
	SB-11 (0.5-2')	10/14/2020	0.5-2	1.1	0.098 U	0.098 U	0.39 U	0.20 U	0.20 U	0.098 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.20 U	0.098 U	0.20 U	0.39 U	0.20 U
SB-12	SB-12 (0-0.5')	10/13/2020	0-0.5	2.8	0.18 I	0.12 U	0.47 U	0.23 U	0.23 U	0.14 I	0.30 I	0.28 I	0.23 U	0.23 U	0.28 I	0.12 U	0.12 U	0.16 I	0.12 U	0.12 U	0.23 U	0.12 U	0.23 U	0.47 U	0.23 U
	SB-12 (0.5-2')	10/13/2020	0.5-2	1.5	0.10 U	0.10 U	0.41 U	0.21 U	0.21 U	0.10 U	0.21 U	0.25 I	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.48 I	0.21 U
SB-13	SB-13 (0-0.5')	10/14/2020	0-0.5	**24**	2.0	0.12 U	2.0	2.3	2.6	2.1	1.5	1.1	1.0	8.5	3.6	0.12 U	0.12 U	1.5	0.18 I	0.18 I	1.8	0.12 I	0.24 U	10	17
	SB-13 (0.5-2')	10/14/2020	0.5-2	**24**	**2.5**	0.10 U	3.9	0.62 I	2.6	2.2	0.83	3.3	0.21 U	0.87	4.4	0.10 U	0.10 U	0.70	0.27 I	0.36 I	0.80 I	0.10 U	0.21 U	1.7	18
	SB-13 (2-4')	10/14/2020	2-4	7.4	2.4	0.11 U	1.4 I	0.21 U	1.9	1.5	0.89	2.7	0.21 U	0.22 I	1.5	0.11 U	0.11 U	0.12 I	0.15 I	0.11 U	0.64 I	0.11 U	0.21 U	0.54 I	4.8
SB-14	SB-14 (0.5-2')	10/12/2020	0.5-2	7.3	**8.2**	0.11 U	0.59 I	0.21 U	9.1	11	2.5	1.8	0.21 U	0.21 U	0.56 I	0.11 U	0.11 U	0.11 U	0.22 I	0.11 U	0.89	0.23 I	0.21 U	0.43 U	0.21 U
	SB-14 (2-4')	10/12/2020	2-4	7.2	0.16 I	0.10 U	0.40 U	0.20 U	0.20 U	0.20 I	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.56 I	4.5
SB-15	SB-15 (0.5-2')	10/13/2020	0.5-2	**73**	**4.2**	0.16 I	1.9	0.19 U	6.8	36	2.1	2.7	0.19 U	0.19 U	0.19 U	0.097 U	0.097 U	0.097 U	0.52	0.097 U	0.88	0.73	0.19 U	0.39 U	1.2
	SB-15 (2-4')	10/13/2020	2-4	**56**	1.3	0.34 I	0.39 U	0.20 U	1.3	5.8	3.4	2.2	0.20 U	0.20 U	0.20 U	0.098 U	0.098 U	0.098 U	0.16 I	0.098 U	1.6	0.37 I	0.20 U	0.39 U	4.9
SB-16	SB-16 (0-0.5')	10/15/2020	0-0.5	3.3	0.37 I	0.11 U	0.43 U	0.21 U	0.28 I	0.63	0.27 I	0.42 I	0.21 U	0.21 U	2.5	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.34 I	0.11 U	0.21 U	0.43 U	0.21 U
	SB-16 (0.5-2')	10/15/2020	0.5-2	2.7	0.28 I	0.10 U	0.59 I	0.21 U	0.26 I	0.79	0.27 I	0.34 I	0.21 U	0.21 U	2.0	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.30 I	0.10 U	0.21 U	0.42 U	0.21 U
	SB-16 (2-4')	10/15/2020	2-4	1.2	0.095 U	0.095 U	0.38 U	0.19 U	0.19 U	0.46	0.19 U	0.19 U	0.19 U	0.19 U	9.2	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.19 U	0.095 U	0.19 U	0.38 U	0.19 U
SB-17	SB-17 (0-0.5')	10/15/2020	0-0.5	**11**	0.51	0.10 U	0.41 U	0.37 I	0.42 I	1.7	0.64 I	0.41 I	0.20 U	0.28 I	0.65 I	0.10 U	0.10 U	0.16 I	0.10 U	0.10 U	1.1	0.10 U	0.20 U	0.41 U	0.25 I
	SB-17 (0.5-2')	10/15/2020	0.5-2	**10**	0.70	0.11 U	0.95 I	0.23 U	0.62 I	1.7	0.27 I	0.56 I	0.23 U	0.23 U	0.88 I	0.11 U	0.11 U	0.15 I	0.11 U	0.16 I	0.38 I	0.11 U	0.23 U	0.46 I	2.0
	SB-17 (2-4')	10/15/2020	2-4	1.6	0.097 U	0.097 U	0.39 U	0.19 U	0.24 I	0.45	0.22 I	0.19 U	0.19 U	0.19 U	0.19 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.19 U	0.097 U	0.19 U	0.39 U	0.22 I
SB-18	SB-18 (0-0.5')	10/12/2020	0-0.5	6.4	0.73	0.14 U	0.58 U	0.29 U	0.59 I	3.5	0.60 I	0.49 I	0.29 U	0.29 U	0.29 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	1.0 I	0.14 U	0.29 U	0.58 U	0.29 U
	SB-18 (0.5-2')	10/12/2020	0.5-2	3.1	0.19 I	0.11 U	0.43 U	0.26 I	0.40 I	0.75	0.22 I	0.22 I	0.22 U	0.40 I	2.4	0.11 U	0.11 U	0.26 I	0.11 U	0.11 U	0.32 I	0.11 U	0.22 U	0.43 U	0.36 I
	SB-18 (2-4')	10/12/2020	2-4	**8.1**	0.25 I	0.11 U	0.65 I	0.23 U	0.23 U	0.49	0.23 U	0.23 U	0.23 U	0.23 U	2.7	0.11 U	0.11 U	0.11 U	0.11 U	0.42 I	0.25 I	0.11 U	0.23 U	0.46 U	0.42 I
SB-19	SB-19 (0-0.5')	10/15/2020	0-0.5	**31**	0.68	0.10 U	0.41 U	0.20 U	0.33 I	5.2	0.37 I	0.20 U	0.20 U	0.20 U	0.63 I	0.10 U	0.10 U	1.7	0.20 I	0.15 I	0.23 I	0.10 U	0.20 U	0.67 I	0.45 I
	SB-19 (0.5-2')	10/15/2020	0.5-2	**16**	0.96	0.10 U	0.40 U	0.20 U	0.20 U	5.6	0.20 U	0.20 U	0.20 U	0.20 U	0.21 I	0.10 U	0.10 U	0.31 I	0.15 I	0.40	0.20 U	0.10 U	0.20 U	0.40 U	0.20 U
	SB-19 (2-4')	10/15/2020	2-4	**8.1**	0.21 I	0.10 U	0.42 U	0.21 U	0.21 U	2.3	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.16 I	0.21 U	0.10 U	0.21 U	0.42 U	0.21 U
SB-20	SB-20 (0-0.5')	10/14/2020	0-0.5	2.6	0.10 U	0.10 U	0.41 U	0.21 U	0.21 U	0.23 I	0.21 U	0.23 I	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.41 U	0.21 U
	SB-20 (0.5-2')	10/14/2020	0.5-2	3.4	0.15 I	0.099 U	0.39 U	0.20 U	0.20 U	0.29 I	0.20 U	0.20 U	0.20 U	0.20 U	0.24 I	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.27 I	0.099 U	0.20 U	0.39 U	0.20 U
	SB-20 (2-4')	10/14/2020	2-4	5.3	0.098 U	0.098 U	0.39 U	0.20 U	0.20 U	0.18 I	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.20 U	0.098 U	0.20 U	0.39 U	0.20 U
SB-21	SB-21 (0-0.5')	10/14/2020	0-0.5	1.3	0.16 I	0.097 U	0.39 U	0.19 U	0.19 U	0.10 I	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.19 U	0.097 U	0.19 U	0.39 U	0.19 U
	SB-21 (0.5-2')	10/14/2020	0.5-2	2.8	0.099 U	0.099 U	0.40 U	0.20 U	0.20 U	0.099 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.20 U	0.099 U	0.20 U	0.40 U	0.20 U
	SB-21 (2-4')	10/14/2020	2-4	0.81 I	0.10 U	0.10 U	0.42 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.45 I	0.21 U
SB-22	SB-22 (0-0.5')	10/14/2020	0-0.5	3.4	0.31 I	0.096 U	0.38 U	0.19 U	0.30 I	0.28 I	0.22 I	0.19 U	0.19 U	0.19 U	1.1	0.096 U	0.096 U	0.13 I	0.096 U	0.13 I	0.35 I	0.096 U	0.19 U	0.38 U	0.19 U
	SB-22 (0.5-2')	10/14/2020	0.5-2	2.8	0.10 U	0.10 U	0.41 U	0.20 U	0.20 U	0.25 I	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.41 U	0.20 U
	SB-22 (2-4')	10/14/2020	2-4	0.64 I	0.10 U	0.10 U	0.41 U	0.20 U	0.20 U	0.17 I	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.41 U	0.20 U
SB-23	SB-23 (0-0.5')	10/14/2020	0-0.5	4.5	0.38 I	0.11 U	0.42 U	0.21 U	0.42 I	0.39 I	0.43 I	0.21 U	0.21 U	0.21 U	0.31 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.61 I	0.11 U	0.21 U	0.42 U	0.21 U
	SB-23 (0.5-2')	10/14/2020	0.5-2	**8.6**	0.11 U	0.11 U	0.42 U	0.21 U	0.21 U	0.19 I	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.11 U	0.21 U	0.42 U	0.21 U
	SB-23 (2-4')	10/14/2020	2-4	**7.6**	0.10 U	0.10 U	0.40 U	0.20 U	0.20 U	0.19 I	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.40 U	0.20 U
SB-24	SB-24 (0-0.5')	10/13/2020	0-0.5	2.5	0.67	0.12 U	0.48 U	0.24 U	0.91 I	4.6	0.78 I	0.24 U	0.24 U	0.28 I	0.24 I	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	2.3	0.15 I	0.24 U	0.48 U	0.24 U
	SB-24 (0.5-2')	10/13/2020	0.5-2	6.4	0.10 U	0.10 U	0.42 U	0.44 I	0.21 U	0.78	0.21 U	0.21 U	0.21 U	0.36 I	2.0	0.10 U	0.10 U	2.0	0.10 U	0.26 I	0.43 I	0.10 U	0.21 U	0.42 U	0.36 I
	SB-24 (2-4')	10/13/2020	2-4	**16**	0.10 U	0.10 U	4.0	0.20 U	0.20 U	0.24 I	0.20 U	0.62 I	0.20 U	0.20 U	2.4	0.10 U	0.11 I	2.6	0.10 U	1.9	0.20 U	0.10 U	0.20 U	0.41 U	40
SB-25	SB-25 (0-0.5')	10/15/2020	0-0.5	1.2	0.13 I	0.11 U	0.44 U	0.22 U	0.22 U	0.19 I	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.44 U	0.22 U
	SB-25 (0.5-2')	10/15/2020	0.5-2	0.90	0.10 U	0.10 U	0.40 U	0.20 U	0.20 U	0.10 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.40 U	0.20 U
SB-26	SB-26 (0-0.5')	10/15/2020	0-0.5	2.4	0.23 I	0.11 U	0.43 U	0.22 U	0.30 I	0.46	0.68 I	0.25 I	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.32 I	0.11 U	0.22 U	0.43 U	0.22 U
	SB-26 (0.5-2')	10/15/2020	0.5-2	0.53 I	0.10 U	0.10 U	0.40 U	0.20 U	0.32 I	0.12 I	0.54 I	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 I	0.10 U	0.20 U	0.40 U	0.20 U
SB-27	SB-27 (0-0.5')	10/15/2020	0-0.5	**15**	0.87	0.21 I	0.41 U	0.33 I	0.75 I	6.4	1.6	0.80 I	0.21 U	0.51 I	2.2	0.10 U	0.10 U	0.19 I	0.13 I	0.10 U	1.7	0.32 I	0.21 U	0.41 U	0.21 U
	SB-27 (0.5-2')	10/15/2020	0.5-2	5.8	0.27 I	0.10 U	0.42 U	0.21 U	0.39 I	3.5	0.42 I	0.29 I	0.21 U	0.21 U	0.74 I	0.10 U	0.10 U	0.22 I	0.10 U	0.16 I	0.63 I	0.12 I	0.21 U	0.42 U	0.21 U
	SB-27 (2-3')	10/15/2020	2-3	**14**	0.23 I	0.098 U	0.81 I	0.20 U	0.20 I	2.9	0.41 I	0.32 I	0.20 U	0.20 U	0.41 I	0.098 U	0.098 U	0.098 U	0.098 U	0.11 I	0.46 I	0.12 I	0.20 U	0.39 U	0.20 U
	SB-27 (4-6')	3/24/2021	4-6	0.71 I	0.28 U	0.14 U	0.57 U	0.28 U	0.28 U	0.78	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.28 U	0.14 U	0.28 U	0.57 U	0.28 U
SB-28	SB-28 (0.5-2')	10/12/2020	0.5-2	6.2	**3.3**	0.10 U	0.40 U	0.20 U	5.9	4.7	1.9	2.4	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	1.0	0.27 I	0.20 U	0.40 U	1.8
	SB-28 (2-4')	10/12/2020	2-4	2.5	0.59	0.15 I	0.46 I	0.46 I	1.6	1.2	3.5	1.4	0.21 U	2.7	23	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	2.3	0.17 I	0.21 U	0.42 U	0.31 I
SB-29	SB-29 (0.5-2')	10/12/2020	0.5-2	**25**	**27**	0.47	5.2	3.9	33	18	30	5.5 J	1.2	25	2.1	0.10 U	0.10 U	1.9	0.59	0.81	23	0.60	0.27 I	92	160
	SB-29 (2-4')	10/12/2020	2-4	**15**	**12**	0.26 I	7.8	0.49 I	9.9	26	20	2.9	0.21 U	0.21 U	4.6	0.10 U	0.10 U	1.3	0.41	3.3	16	0.67	0.32 I	23	140
SB-30	SB-30 (0.5-2')	10/12/2020	0.5-2	**19**	**4.7**	0.10 U	0.64 I	0.20 U	6.9	4.5	2.9	2.2	0.20 U	0.20 U	0.43 I	0.14 I	0.10 U	0.10 U	0.16 I	0.12 I	1.8	0.13 I	0.20 U	4.9	16
	SB-30 (2-4')	10/12/2020	2-4	**65**	2.4	0.10 U	0.41 U	0.20 U	1.2	1.7	2.3	2.9	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.23 I	0.10 U	2.5	0.10 U	0.20 U	21	27
SB-31	SB-31 (0-0.5')	10/14/2020	0-0.5	2.5	0.22 I	0.10 U	0.41 U	0.20 U	0.24 I	0.23 I	0.31 I	0.25 I	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.38 I	0.10 U	0.20 U	0.41 U	0.20 U
	SB-31 (0.5-2')	10/14/2020	0.5-2	1.8	0.12 I	0.098 U	0.39 U	0.20 U	0.20 I	0.15 I	0.22 I	0.20 U	0.20 U	0.20 U	0.20 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.48 I	0.098 U	0.20 U	0.39 U	0.20 U
	SB-31 (2-4')	10/14/2020	2-4	0.81 I	0.10 U	0.10 U	0.41 U	0.20 U	0.20 U	0.12 I	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.41 U	0.20 U
SB-32	SB-32 (0-0.5')	10/14/2020	0-0.5	**13**	0.30 I	0.10 U	0.40 U	0.32 I	0.32 I	1.3	0.20 U	0.20 U	0.20 U	0.20 U	1.0	0.10 U	0.10 U	0.11 I	0.14 I	0.10 U	0.37 I	0.10 U	0.20 U	0.74 I	0.56 I
	SB-32 (0.5-2')	10/14/2020	0.5-2	2.7	0.19 I	0.11 U	0.46 I	0.21 U	0.27 I	0.16 I	0.24 I	0.21 U	0.21 U	0.21 U	0.23 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.32 I	0.11 U	0.21 U	0.43 U	0.21 U
	SB-32 (2-4')	10/14/2020	2-4	4.1	0.11 I	0.097 U	0.39 U	0.19 U	0.21 I	0.11 I	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.11 I	0.097 U	0.097 U	0.097 U	0.097 U	0.22 I	0.097 U	0.19 U	0.39 U	0.19 U
SB-33	SB-33 (0-0.5')	10/14/2020	0-0.5	3.7	0.25 I	0.11 U	0.42 U	0.21 U	0.21 U	0.56	0.21 U	0.23 I	0.21 U	0.21 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.35 I	0.11 U	0.21 U	0.42 U	0.21 U
	SB-33 (0.5-2')	10/14/2020	0.5-2	6.5	0.21 I	0.11 U	0.45 U	0.22 U	0.22 U	0.32 I	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.42 I	0.11 U	0.22 U	0.45 U	0.22 U
	SB-33 (2-4')	10/14/2020	2-4	**9.8**	0.13 I	0.11 U	0.42 U	0.21 U	0.21 U	0.39 I	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.25 I	0.11 U	0.21 U	0.42 U	0.21 U
SB-34	SB-34 (0.5-2')	10/13/2020	0.5-2	**24**	0.98	0.10 U	0.41 U	0.20 U	1.9	2.2	0.20 U	0.68 I	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.29 I	0.10 U	0.20 U	0.41 U	0.20 U
	SB-34 (2-4')	10/13/2020	2-4	6.8	0.10 U	0.10 U	0.41 U	0.20 U	0.69 I	0.29 I	0.33 I	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.23 I	0.10 U	0.20 U	0.41 U	0.20 U
SB-35	SB-35 (0.5-2')	10/12/2020	0.5-2	3.4	**2.6**	0.097 U	0.39 U	0.19 U	7.2	3.0	3.2	0.42 I	0.19 U	0.19 U	0.19 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	2.2	0.12 I	0.19 U	0.39 U	1.5
	SB-35 (2-3')	10/12/2020	2-3	7.0	**5.0**	0.10 U	0.92 I	0.21 U	4.3	2.7	3.4	2.7	0.21 U	1.8	2.0	0.10 U	0.10 U	0.12 I	0.10 U	0.10 U	2.5	0.11 I	0.21 U	0.41 U	0.86
SB-36	SB-36 (0.5-2')	10/12/2020	0.5-2	4.8	**2.7**	0.10 U	0.40 U	0.20 U	3.7	1.5	0.34 I	1.2	0.20 U	0.20 U	0.22 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.25 I	0.10 U	0.20 U	0.40 U	0.20 U
	SB-36 (2-4')	10/12/2020	2-4	1.1	0.10 U	0.10 U	0.41 U	0.21 U	0.71 I	0.47	0.72 I	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.33 I	0.10 U	0.21 U	0.41 U	0.21 U
SB-37	SB-37 (0-0.5')	10/15/2020	0-0.5	**12**	0.39 I	0.19 I	0.40 U	0.25 I	0.28 I	4.1	0.90	0.20 U	0.20 U	0.37 I	1.0	0.10 U	0.10 U	1.1	0.18 I	0.11 I	0.68 I	0.27 I	0.20 U	0.40 U	0.20 I
	SB-37 (0.5-2')	10/15/2020	0.5-2	3.9	0.19 I	0.10 U	0.41 U	0.20 U	0.24 I	2.9	0.29 I	0.20 U	0.20 U	0.20 U	0.41 I	0.10 U	0.10 U	0.53	0.10 U	0.15 I	0.30 I	0.16 I	0.20 U	0.41 U	0.20 U

TABLE 2: SOIL ANALYTICAL RESULTS FOR PFAS COMPOUNDS
Former Florida State Fire College

Sample Location	Sample ID	Sample Date	Sample Interval (ft BLS)	PFOS	PFOA	PFBS	PFDA	PFDoA	PFHpA	PFHxS	PFHxA	PFNA	PFTeA	PFTriA	PFUnA	NMeFOSAA	NEtFOSAA	PFDS	PFHpS	PFNS	PFPeA	PFPeS	4:2 FTS	6:2 FTS	8:2 FTS
Provisional Residential SCTL				**1,300**	**1,300**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Provisional Industrial SCTL				**25,000**	**25,000**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Provisional Leachability SCTL				**7**	**2**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-37	SB-37 (2-4')	10/15/2020	2-4	**17**	0.41	0.22 I	0.41 U	0.20 U	0.26 I	8.1	0.54 I	0.20 U	0.20 U	0.20 U	0.55 I	0.10 U	0.10 U	6.8	0.38 I	0.52	0.31 I	0.38 I	0.20 U	0.41 U	0.20 U
	SB-37 (4-6')	10/15/2020	4-6	1.9	0.10 U	0.15 I	0.40 U	0.20 U	0.20 U	2.3	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.63	0.10 U	0.13 I	0.20 U	0.22 I	0.20 U	0.40 U	0.20 U
SB-38	SB-38 (0-0.5')	10/15/2020	0-0.5	4.5	0.54	0.12 U	0.47 U	0.24 U	0.44 I	0.46 I	0.81 I	0.38 I	0.24 U	0.24 U	0.84 I	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	1.1	0.12 U	0.24 U	0.47 U	0.24 U
	SB-38 (0.5-2')	10/15/2020	0.5-2	1.4	0.096 U	0.096 U	0.38 U	0.19 U	0.25 I	0.18 I	0.67 I	0.19 U	0.19 U	0.19 U	0.19 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.23 I	0.096 U	0.19 U	0.38 U	0.19 U
SB-39	SB-39 (0-0.5')	10/13/2020	0-0.5	3.3	0.36 I	0.13 U	0.50 U	0.25 U	0.53 I	0.90	0.61 I	0.25 U	0.25 U	0.25 U	0.57 I	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.79 I	0.13 U	0.25 U	0.50 U	0.25 U
	SB-39 (0.5-2')	10/13/2020	0.5-2	2.7	0.10 U	0.10 U	0.41 U	0.21 U	0.21 U	0.18 I	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.41 U	0.21 U
	SB-39 (2-4')	10/13/2020	2-4	3.8	0.11 U	0.11 U	0.43 U	0.21 U	0.21 U	0.13 I	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.11 U	0.21 U	0.43 U	0.21 U
SB-40	SB-40 (0.5-2')	10/13/2020	0.5-2	1.5	0.11 I	0.10 U	0.41 U	0.21 U	0.21 U	0.11 I	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.23 I	0.10 U	0.21 U	0.41 U	0.21 U
	SB-40 (2-4')	10/13/2020	2-4	2.1	0.12 I	0.10 U	0.42 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.42 U	0.21 U
SB-41	SB-41 (0-0.5')	10/13/2020	0-0.5	7.0	0.89	0.17 U	0.67 U	0.33 U	1.1 I	1.9	0.64 I	0.39 I	0.33 U	0.33 U	0.33 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	1.6	0.18 I	0.33 U	0.67 U	0.33 U
	SB-41 (0.5-2')	10/13/2020	0.5-2	**8.4**	0.26 I	0.11 U	0.66 I	0.22 U	0.41 I	0.72	0.33 I	0.44 I	0.22 U	0.53 I	1.7	0.11 U	0.11 U	0.11 I	0.11 U	0.11 U	0.66 I	0.11 U	0.22 U	0.43 U	0.22 U
	SB-41 (2-4')	10/13/2020	2-4	1.6	0.10 U	0.10 U	0.41 U	0.21 U	0.21 U	0.22 I	0.21 U	0.27 I	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.41 U	0.21 U
SB-42	SB-42 (0-0.5')	10/14/2020	0-0.5	**12**	0.32 I	0.10 U	0.40 U	0.69 I	0.43 I	0.74	0.45 I	0.24 I	0.20 U	0.20 U	1.4	0.10 U	0.10 U	0.22 I	0.10 U	0.10 U	0.38 I	0.10 U	0.20 U	0.40 U	0.50 I
	SB-42 (0.5-2')	10/14/2020	0.5-2	6.4	0.13 I	0.11 U	0.45 I	1.4	0.31 I	0.38 I	0.22 U	0.22 U	0.26 I	0.76 I	0.93	0.11 U	0.11 U	0.51	0.11 U	0.11 U	0.31 I	0.11 U	0.22 U	0.43 U	0.22 U
	SB-42 (2-4')	10/14/2020	2-4	**9.5**	0.25 I	0.097 U	0.80 I	0.19 U	0.23 I	0.17 I	0.19 U	0.31 I	0.19 U	0.19 U	0.76 I	0.097 U	0.097 U	0.097 U	0.097 U	0.19 I	0.19 U	0.097 U	0.19 U	0.39 U	0.41 I
	SB-42 (4-6')	10/14/2020	4-6	**7.5 J**	0.26 IJ	0.16 UJ	0.66 UJ	0.33 UJ	0.33 UJ	0.16 UJ	0.33 UJ	0.36 IJ	0.33 UJ	0.33 UJ	0.33 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.16 UJ	0.33 UJ	0.16 UJ	0.33 UJ	0.66 UJ	0.33 UJ
SB-43	SB-43 (0-0.5')	10/14/2020	0-0.5	4.8	0.45 I	0.13 U	0.50 U	0.25 U	0.52 I	0.51	0.56 I	0.34 I	0.25 U	0.25 U	1.1	0.13 U	0.13 U	0.13 I	0.13 U	0.13 U	0.82 I	0.13 U	0.25 U	0.50 U	0.25 U
	SB-43 (0.5-2')	10/14/2020	0.5-2	2.5	0.16 I	0.11 U	0.43 U	0.22 U	0.22 U	0.18 I	0.22 U	0.22 U	0.22 U	0.45 I	0.54 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.55 I	0.50 I
	SB-43 (2-4')	10/14/2020	2-4	2.0 J	0.14 UJ	0.14 UJ	0.55 UJ	0.27 UJ	0.27 UJ	0.14 UJ	0.27 UJ	0.27 UJ	0.27 UJ	0.29 IJ	2.3 J	0.14 UJ	0.14 UJ	0.14 UJ	0.14 UJ	0.14 UJ	0.27 UJ	0.14 UJ	0.27 UJ	0.55 UJ	0.27 UJ
	SB-43 (4-6')	10/14/2020	4-6	3.9	0.11 U	0.11 U	0.42 U	0.21 U	0.21 U	0.13 I	0.21 U	0.21 U	0.21 U	0.32 I	1.4	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.11 U	0.21 U	0.42 U	0.25 I
SB-44	SB-44 (0-0.5')	10/14/2020	0-0.5	1.7	0.15 I	0.10 U	0.42 U	0.21 U	0.21 U	0.11 I	0.21 U	0.21 U	0.21 U	0.21 U	0.35 I	0.10 U	0.12 I	0.10 U	0.10 U	0.10 U	0.31 I	0.10 U	0.21 U	0.42 U	0.21 U
	SB-44 (0.5-2')	10/14/2020	0.5-2	7.0	0.33 I	0.11 U	0.42 U	0.21 U	0.64 I	0.24 I	0.52 I	0.51 I	0.21 U	0.21 U	0.82 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.64 I	0.11 U	0.21 U	0.42 U	0.21 U
	SB-44 (2-4')	10/14/2020	2-4	2.4	0.14 I	0.10 U	0.41 U	0.21 U	0.21 U	0.17 I	0.21 U	0.50 I	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.41 U	0.21 U
	SB-44 (4-6')	10/14/2020	4-6	0.71 I	0.098 U	0.098 U	0.39 U	0.20 U	0.20 U	0.098 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.20 U	0.098 U	0.20 U	0.39 U	0.20 U
SB-45	SB-45 (0-0.5')	10/14/2020	0-0.5	3.3	0.25 I	0.10 U	0.41 U	0.21 U	0.43 I	0.16 I	0.21 U	0.32 I	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.31 I	0.10 U	0.21 U	0.41 U	0.21 U
	SB-45 (0.5-2')	10/14/2020	0.5-2	7.2	0.15 I	0.10 U	0.42 U	0.21 U	0.27 I	0.27 I	0.21 U	0.21 U	0.21 U	0.21 U	0.34 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.42 U	0.21 U
	SB-45 (2-4')	10/14/2020	2-4	**16**	0.15 I	0.10 U	0.40 U	0.20 U	0.20 U	0.27 I	0.20 U	0.79 I	0.20 U	0.20 U	0.46 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.23 I	0.10 U	0.20 U	0.40 U	0.20 U
	SB-45 (4-6')	3/24/2021	4-6	0.92	0.21 U	0.11 U	0.42 U	0.21 U	0.21 U	0.11 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.11 U	0.21 U	0.42 U	0.21 U
	SB-45 (6-8')	3/24/2021	6-8	0.69 I	0.21 U	0.11 U	0.42 U	0.21 U	0.21 U	0.11 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.11 U	0.21 U	0.42 U	0.21 U
	SB-45 (10-12')	3/24/2021	10-12	0.91 I	0.23 U	0.12 U	0.47 U	0.23 U	0.23 U	0.12 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.23 U	0.12 U	0.23 U	0.47 U	0.23 U
	SB-45 (13-15')	3/24/2021	13-15	0.55 I	0.23 U	0.11 U	0.46 U	0.23 U	0.23 U	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.23 U	0.11 U	0.23 U	0.46 U	0.23 U
	SB-45 (23-25')	3/24/2021	23-25	0.29 U	0.29 U	0.15 U	0.58 U	0.29 U	0.29 U	0.15 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.29 U	0.15 U	0.29 U	0.58 U	0.29 U
	SB-45 (28-30')	3/24/2021	28-30	0.61 I	0.26 U	0.13 U	0.52 U	0.26 U	0.26 U	0.13 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.26 U	0.13 U	0.26 U	0.52 U	0.26 U
SB-46	SB-46 (0.5-2')	10/12/2020	0.5-2	1.3	0.65	0.10 U	0.41 U	0.20 U	0.67 I	0.46	0.36 I	0.28 I	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.34 I	0.10 U	0.20 U	0.41 U	0.20 U
	SB-46 (2-4')	10/12/2020	2-4	0.33 I	0.23 I	0.096 U	0.39 U	0.19 U	0.36 I	0.11 I	0.32 I	0.19 U	0.19 U	0.19 U	0.19 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.35 I	0.096 U	0.19 U	0.39 U	0.19 U
SB-47	SB-47 (0.5-2')	10/12/2020	0.5-2	1.1	0.49	0.097 U	0.39 U	0.19 U	0.58 I	0.23 I	0.19 U	0.23 I	0.19 U	0.19 U	0.19 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.36 I	0.097 U	0.19 U	0.39 U	0.19 U
	SB-47 (2-4')	10/12/2020	2-4	0.22 U	0.15 I	0.11 U	0.45 U	0.22 U	0.22 U	0.11 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.45 U	0.22 U
SB-48	SB-48 (0-0.5')	10/15/2020	0-0.5	**13**	0.99	0.12 U	0.49 U	0.25 U	1.0	1.2	0.97 I	1.3	0.25 U	0.25 U	0.41 I	0.12 U	0.12 U	0.21 I	0.12 U	0.12 U	0.84 I	0.12 U	0.25 U	0.49 U	0.25 U
	SB-48 (0.5-2')	10/15/2020	0.5-2	**13**	1.3	0.16 I	0.55 U	0.27 U	0.70 I	17	0.77 I	11	0.27 U	0.27 U	0.27 U	0.14 U	0.14 U	0.14 U	0.49 I	0.14 U	0.49 I	0.27 I	0.27 U	0.55 U	0.27 U
	SB-48 (2-3')	10/15/2020	2-3	**10**	0.61	0.14 U	0.57 U	0.28 U	0.56 I	3.6	0.82 I	3.1	0.28 U	0.28 U	0.28 U	0.14 U	0.14 U	0.14 U	0.19 I	0.14 U	0.70 I	0.14 U	0.28 U	0.57 U	0.28 U
	SB-48 (4-6')	3/23/2021	4-6	0.69 I	0.22 U	0.11 U	0.44 U	0.22 U	0.22 U	0.22 I	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.44 U	0.22 U
SB-49	SB-49 (0-0.5')	10/15/2020	0-0.5	4.1	0.41	0.10 U	0.41 U	0.21 U	0.28 I	0.10 U	0.21 U	0.25 I	0.21 U	0.21 U	0.21 UJ	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.41 U	0.21 U
	SB-49 (0.5-2')	10/15/2020	0.5-2	1.3	0.13 I	0.10 U	0.40 U	0.20 U	0.29 I	0.10 U	0.20 I	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.40 U	0.20 U
SB-50	SB-50 (0.5-2')	10/12/2020	0.5-2	3.4	0.22 I	0.10 U	0.40 U	0.20 U	0.24 I	0.13 I	0.20 U	0.45 I	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.40 U	0.20 U
	SB-50 (2-4')	10/12/2020	2-4	4.2	0.40 I	0.11 U	0.44 U	0.22 U	0.22 U	0.56	0.22 U	0.60 I	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.44 U	0.22 U
SB-51	SB-51 (0.5-2')	10/12/2020	0.5-2	1.3	0.22 I	0.11 U	0.43 U	0.21 U	0.34 I	0.13 I	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.11 U	0.21 U	0.43 U	0.21 U
	SB-51 (2-4')	10/12/2020	2-4	0.29 U	0.15 U	0.15 U	0.58 U	0.29 U	0.29 U	0.15 I	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.29 U	0.15 U	0.29 U	1.7 I	0.29 U
SB-52	SB-52 (0.5-2')	10/13/2020	0.5-2	1.0	0.15 I	0.093 U	0.37 U	0.19 U	0.25 I	0.17 I	0.19 U	0.23 I	0.19 U	0.19 U	0.19 U	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U	0.19 U	0.093 U	0.19 U	0.37 U	0.19 U
	SB-52 (2-4')	10/13/2020	2-4	0.21 U	0.14 I	0.10 U	0.41 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.41 U	0.21 U
SB-53	SB-53 (0-0.5')	10/15/2020	0-0.5	4.1	0.52	0.11 U	0.43 U	0.22 U	0.49 I	0.46	0.53 I	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.48 I	0.11 U	0.22 U	0.43 U	0.22 U
	SB-53 (0.5-2')	10/15/2020	0.5-2	0.42 I	0.11 U	0.11 U	0.42 U	0.21 U	0.21 U	0.11 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.11 U	0.21 U	0.42 U	0.21 U
SB-54	SB-54 (0-0.5')	10/15/2020	0-0.5	4.2	0.52	0.11 U	0.43 U	0.29 I	0.31 I	0.24 I	0.22 I	0.30 I	0.22 U	0.22 U	0.44 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.26 I	0.11 U	0.22 U	0.52 I	0.22 U
	SB-54 (0.5-2')	10/15/2020	0.5-2	0.69 I	0.15 I	0.13 U	0.51 U	0.26 U	0.26 U	0.13 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.26 U	0.13 U	0.26 U	0.51 U	0.26 U
	SB-54 (2-4')	10/15/2020	2-4	0.51 I	0.15 I	0.12 U	0.47 U	0.24 U	0.24 U	0.14 I	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.24 U	0.12 U	0.24 U	0.47 U	0.24 U
SB-55	SB-55 (0-0.5')	10/13/2020	0-0.5	2.0	0.32 I	0.11 U	0.43 U	0.22 U	0.22 U	0.24 I	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.26 I	0.11 U	0.22 U	0.43 U	0.22 U
	SB-55 (0.5-2')	10/13/2020	0.5-2	1.4	0.11 U	0.11 U	0.44 U	0.22 U	0.22 U	0.11 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.44 U	0.22 U
	SB-55 (2-4')	10/13/2020	2-4	7.1	0.18 I	0.11 U	0.43 U	0.21 U	0.21 U	0.33 I	0.21 U	0.64 I	0.21 U	1.1	2.5	0.11 U	0.11 U	0.18 I	0.11 U	0.11 U	0.21 U	0.11 U	0.21 U	0.43 U	0.21 U
SB-56	SB-56 (0-0.5')	10/13/2020	0-0.5	1.2 I	0.16 U	0.16 U	0.65 U	0.32 U	0.39 I	0.60 I	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.32 U	0.16 U	0.32 U	0.65 U	0.32 U
	SB-56 (0.5-2')	10/13/2020	0.5-2	2.0	0.16 I	0.11 U	0.42 U	0.21 U	0.21 U	0.13 I	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.11 U	0.21 U	0.42 U	0.21 U
	SB-56 (2-4')	10/13/2020	2-4	0.78 I	0.19 I	0.12 U	0.48 U	0.24 U	0.36 I	0.12 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.24 U	0.12 U	0.24 U	0.48 U	0.24 U
SB-57	SB-57 (0-0.5')	3/22/2021	0-0.5	2.9	0.20 U	0.10 U	0.42 I	0.20 U	0.20 U	0.15 I	0.20 U	0.20 U	0.20 U	0.20 U	0.32 I	0.10 U	0.10 U	0.15 I	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.41 U	0.20 U
	SB-57 (0.5-2')	3/22/2021	0.5-2	2.7	0.20 U	0.10 U	0.66 I	0.20 U	0.20 U	0.10 U	0.20 U	0.20 U	0.20 U	0.20 U	0.22 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.41 U	0.20 U
	SB-57 (2-4')	3/22/2021	2-4	**8.9**	0.21 U	0.10 U	0.61 I	0.21 U	0.21 U	0.11 I	0.21 U	1.2	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.41 U	0.21 U
	SB-57 (4-6')	3/22/2021	4-6	1.5	0.20 U	0.099 U	0.40 U	0.20 U	0.20 U	0.12 I	0.20 U	0.31 I	0.20 U	0.20 U	0.20 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.20 U	0.099 U	0.20 U	0.40 U	0.20 U
SB-58	SB-58 (0-0.5')	3/22/2021	0-0.5	3.9	0.20 I	0.099 U	0.40 U	0.20 U	0.24 I	0.27 I	0.20 U	0.20 U	0.20 U	0.20 U	0.46 I	0.099 U	0.099 U	0.32 I	0.099 U	0.099 U	0.20 U	0.099 U	0.20 U	0.46 I	0.20 U
	SB-58 (0.5-2')	3/22/2021	0.5-2	**58**	0.33 I	0.10 U	2.1	0.21 U	0.27 I	0.86	0.70 I	0.36 I	0.21 U	0.21 U	0.23 I	0.10 U	0.10 U	0.29 I	0.13 I	0.24 I	0.21 U	0.10 U	0.21 U	0.50 I	6.6
	SB-58 (2-4')	3/22/2021	2-4	**13**	0.85 I	0.13 U	1.0 I	0.90 I	0.72 I	1.5	0.30 I	2.4	0.27 U	0.55 I	1.0 I	0.13 U	0.13 U	0.13 U	0.40 I	0.13 U	0.41 I	0.13 U	0.27 U	0.53 U	0.27 U
	SB-58 (4-6')	3/22/2021	4-6	3.2	0.53 I	0.096 U	1.1 I	0.19 U	0.26 I	0.62	0.19 U	0.33 I	0.19 U	0.19 U	1.5	0.096 U	0.096 U	0.096 U	0.13 I	0.096 U	0.19 U	0.096 U	0.19 U	0.39 U	0.19 U
SB-59	SB-59 (0-0.5')	3/22/2021	0-0.5	3.2	0.29 I	0.10 U	0.41 U	0.21 U	0.21 U	0.13 I	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.22 I	0.10 U	0.21 U	0.41 U	0.21 U
	SB-59 (0.5-2')	3/22/2021	0.5-2	2.6	0.19 U	0.097 U	0.39 U	0.19 U	0.19 U	0.097 U	0.19 U	0.19 U	0.19 U	0.19 U	0.21 I	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.19 U	0.097 U	0.19 U	0.39 U	0.19 U

TABLE 2: SOIL ANALYTICAL RESULTS FOR PFAS COMPOUNDS
Former Florida State Fire College

Sample Location	Sample ID	Sample Date	Sample Interval (ft BLS)	PFOS	PFOA	PFBS	PFDA	PFDoA	PFHpA	PFHxS	PFHxA	PFNA	PFTeA	PFTriA	PFUnA	NMeFOSAA	NEtFOSAA	PFDS	PFHpS	PFNS	PFPeA	PFPeS	4:2 FTS	6:2 FTS	8:2 FTS
Provisional Residential SCTL				1,300	1,300	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Provisional Industrial SCTL				25,000	25,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Provisional Leachability SCTL				7	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-59	SB-59 (2-4')	3/22/2021	2-4	5.6	0.21 U	0.11 U	0.44 I	0.21 U	0.21 U	0.12 I	0.23 I	0.60 I	0.21 U	0.21 U	0.33 I	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.27 I	0.11 U	0.21 U	0.48 I	0.21 U
	SB-59 (4-6')	3/22/2021	4-6	0.80 I	0.20 U	0.10 U	0.40 U	0.20 U	0.20 U	0.10 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.40 U	0.20 U
SB-60	SB-60 (0-0.5')	3/22/2021	0-0.5	2.5	0.20 U	0.10 U	0.40 U	0.20 U	0.20 U	0.19 I	0.20 U	0.20 U	0.20 U	0.40 I	0.23 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.24 I	0.10 U	0.20 U	0.40 U	0.20 U
	SB-60 (0.5-2')	3/22/2021	0.5-2	2.9	0.23 U	0.12 U	0.46 U	0.23 U	0.23 U	0.23 I	0.23 U	0.23 U	0.23 U	0.23 U	0.87 I	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.28 I	0.12 U	0.23 U	0.54 I	0.23 U
	SB-60 (2-4')	3/22/2021	2-4	3.4	0.21 U	0.10 U	0.42 U	0.21 U	0.21 I	0.18 I	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.24 I	0.10 U	0.21 U	0.42 U	0.21 U
	SB-60 (4-6')	3/22/2021	4-6	1.5	0.21 U	0.10 U	0.41 U	0.21 U	0.21 U	0.13 I	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.41 U	0.21 U
SB-61	SB-61 (0-0.5')	3/22/2021	0-0.5	4.7	0.40 I	0.10 U	0.42 U	0.21 U	0.27 I	0.17 I	0.24 I	0.32 I	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.44 I	0.10 U	0.21 U	0.42 U	0.21 U
	SB-61 (0.5-2')	3/22/2021	0.5-2	5.1	0.26 I	0.10 U	0.41 U	0.21 U	0.28 I	0.14 I	0.29 I	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.36 I	0.10 U	0.21 U	0.41 U	0.21 U
	SB-61 (2-4')	3/22/2021	2-4	0.66 I	0.21 U	0.10 U	0.42 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.42 U	0.21 U
	SB-61 (4-6')	3/22/2021	4-6	0.28 I	0.20 U	0.098 U	0.39 U	0.20 U	0.20 U	0.098 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.20 U	0.098 U	0.20 U	0.39 U	0.20 U
	SB-61 (6-8')	3/22/2021	6-8	0.30 I	0.23 U	0.12 U	0.47 U	0.23 U	0.23 U	0.12 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.23 U	0.12 U	0.23 U	0.47 U	0.23 U
	SB-61 (10-12')	3/22/2021	10-12	0.27 U	0.27 U	0.14 U	0.55 U	0.27 U	0.27 U	0.14 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.27 U	0.14 U	0.27 U	0.55 U	0.27 U
	SB-61 (13-15')	3/22/2021	13-15	0.31 U	0.31 U	0.15 U	0.61 U	0.31 U	0.31 U	0.15 U	0.31 U	0.31 U	0.31 U	0.31 U	0.31 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.31 U	0.15 U	0.31 U	0.61 U	0.31 U
	SB-61 (23-25')	3/22/2021	23-25	0.28 U	0.28 U	0.14 U	0.57 U	0.28 U	0.28 U	0.14 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.28 U	0.14 U	0.28 U	0.57 U	0.28 U
	SB-61 (28-30')	3/22/2021	28-30	0.25 U	0.25 U	0.12 U	0.49 U	0.25 U	0.25 U	0.12 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.25 U	0.12 U	0.25 U	0.49 U	0.25 U
SB-62	SB-62 (0-0.5')	3/22/2021	0-0.5	2.5	0.22 I	0.11 U	0.43 U	0.22 U	0.22 U	0.11 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.43 U	0.22 U
	SB-62 (0.5-2')	3/22/2021	0.5-2	2.6	0.25 I	0.096 U	0.38 U	0.19 U	0.29 I	0.10 I	0.33 I	0.22 I	0.19 U	0.19 U	0.19 U	0.096 U	0.096 U	0.096 U	0.096 U	0.096 U	0.35 I	0.096 U	0.19 U	0.38 U	0.19 U
	SB-62 (2-4')	3/22/2021	2-4	0.21 U	0.21 U	0.10 U	0.41 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.41 U	0.21 U
	SB-62 (4-6')	3/22/2021	4-6	0.21 U	0.21 U	0.10 U	0.41 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.43 I	0.21 U
SB-63	SB-63 (0-0.5')	3/23/2021	0-0.5	6.5	0.58 I	0.11 U	0.43 U	0.22 U	0.47 I	0.32 I	0.29 I	0.35 I	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.41 I	0.11 U	0.22 U	0.43 U	0.22 U
	SB-63 (0.5-2')	3/23/2021	0.5-2	2.0	0.20 I	0.097 U	0.39 U	0.19 U	0.19 U	0.12 I	0.22 I	0.19 U	0.19 U	0.19 U	0.19 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.20 I	0.097 U	0.19 U	0.39 U	0.19 U
	SB-63 (2-4')	3/23/2021	2-4	0.67 I	0.20 U	0.10 U	0.41 U	0.20 U	0.20 U	0.11 I	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.41 U	0.20 U
	SB-63 (4-6')	3/23/2021	4-6	0.22 I	0.20 U	0.099 U	0.40 U	0.20 U	0.20 U	0.099 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.20 U	0.099 U	0.20 U	0.40 U	0.20 U
	SB-63 (6-8')	3/23/2021	6-8	0.19 U	0.19 U	0.095 U	0.38 U	0.19 U	0.19 U	0.095 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.19 U	0.095 U	0.19 U	0.38 U	0.19 U
	SB-63 (10-12')	3/23/2021	10-12	0.29 I	0.21 U	0.11 U	0.42 U	0.21 U	0.21 U	0.11 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.11 U	0.21 U	0.42 U	0.21 U
	SB-63 (13-15')	3/23/2021	13-15	0.22 U	0.22 U	0.11 U	0.44 U	0.22 U	0.22 U	0.11 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.44 U	0.22 U
	SB-63 (23-25')	3/23/2021	23-25	0.23 U	0.23 U	0.12 U	0.46 U	0.23 U	0.23 U	0.12 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.23 U	0.12 U	0.23 U	0.46 U	0.23 U
	SB-63 (33-35')	3/23/2021	33-35	0.29 U	0.29 U	0.14 U	0.58 U	0.29 U	0.29 U	0.14 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.29 U	0.14 U	0.29 U	0.58 U	0.29 U
SB-64	SB-64 (0-0.5')	3/23/2021	0-0.5	5.2	0.46 I	0.10 U	0.40 U	0.20 U	0.40 I	0.22 I	0.26 I	0.21 I	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.40 I	0.10 U	0.20 U	0.40 U	0.20 U
	SB-64 (0.5-2')	3/23/2021	0.5-2	2.2	0.20 U	0.099 U	0.40 U	0.20 U	0.20 U	0.12 I	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.23 I	0.099 U	0.20 U	0.40 U	0.20 U
	SB-64 (2-4')	3/23/2021	2-4	3.4	0.20 U	0.10 U	0.40 U	0.20 U	0.20 U	0.11 I	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 I	0.10 U	0.20 U	0.40 U	0.20 U
	SB-64 (4-6')	3/23/2021	4-6	0.38 I	0.20 U	0.10 U	0.41 U	0.20 U	0.20 U	0.10 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 I	0.10 U	0.20 U	0.41 U	0.20 U
SB-65	SB-65 (0-0.5')	3/24/2021	0-0.5	4.4	0.20 U	0.10 U	0.40 U	0.20 U	0.20 U	0.18 I	0.50 I	0.20 U	0.20 U	0.20 U	0.29 I	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.45 I	0.10 U	0.20 U	0.40 U	0.20 U
	SB-65 (0.5-2')	3/24/2021	0.5-2	7.2	0.21 U	0.11 U	0.43 U	0.21 U	0.21 U	0.23 I	0.38 I	0.21 U	0.21 U	0.21 U	0.65 I	0.11 U	0.11 U	0.21 I	0.11 U	0.11 U	0.27 I	0.11 U	0.21 U	0.43 U	0.21 U
SB-66	SB-66 (0-0.5')	3/23/2021	0-0.5	0.19 U	0.19 U	0.097 U	0.39 U	0.19 U	0.19 U	0.097 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.19 U	0.097 U	0.19 U	0.39 U	0.19 U
	SB-66 (0.5-2')	3/23/2021	0.5-2	0.20 U	0.20 U	0.10 U	0.40 U	0.20 U	0.20 U	0.10 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.40 U	0.20 U
	SB-66 (2-4')	3/23/2021	2-4	0.20 U	0.20 U	0.10 U	0.41 U	0.20 U	0.20 U	0.10 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.41 U	0.20 U
	SB-66 (4-6')	3/23/2021	4-6	0.21 U	0.21 U	0.10 U	0.42 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.42 U	0.21 U
SB-67	SB-67 (0-0.5')	3/23/2021	0-0.5	0.68 I	0.21 U	0.10 U	0.42 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.42 U	0.21 U
	SB-67 (0.5-2')	3/23/2021	0.5-2	0.54 I	0.19 U	0.094 U	0.38 U	0.19 U	0.19 U	0.094 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U	0.19 U	0.094 U	0.19 U	0.38 U	0.19 U
	SB-67 (2-4')	3/23/2021	2-4	0.19 U	0.19 U	0.097 U	0.39 U	0.19 U	0.19 U	0.097 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.19 U	0.097 U	0.19 U	0.39 U	0.19 U
	SB-67 (4-6')	3/23/2021	4-6	0.25 U	0.25 U	0.13 U	0.50 U	0.25 U	0.25 U	0.13 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.25 U	0.13 U	0.25 U	0.50 U	0.25 U
SB-68	SB-68 (0-0.5')	3/23/2021	0-0.5	0.32 I	0.20 U	0.098 U	0.39 U	0.20 U	0.20 U	0.098 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.20 U	0.098 U	0.20 U	0.39 U	0.20 U
	SB-68 (0.5-2')	3/23/2021	0.5-2	0.20 U	0.20 U	0.10 U	0.40 U	0.20 U	0.20 U	0.10 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.40 U	0.20 U
	SB-68 (2-4')	3/23/2021	2-4	0.21 U	0.21 U	0.10 U	0.41 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.41 U	0.21 U
	SB-68 (4-6')	3/23/2021	4-6	0.22 U	0.22 U	0.11 U	0.43 U	0.22 U	0.22 U	0.11 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.43 U	0.22 U
	SB-68 (6-8')	3/23/2021	6-8	0.24 U	0.24 U	0.12 U	0.48 U	0.24 U	0.24 U	0.12 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.24 U	0.12 U	0.24 U	0.48 U	0.24 U
	SB-68 (10-12')	3/23/2021	10-12	0.30 U	0.30 U	0.15 U	0.60 U	0.30 U	0.30 U	0.15 U	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.30 U	0.15 U	0.30 U	0.60 U	0.30 U
	SB-68 (13-15')	3/23/2021	13-15	0.26 U	0.26 U	0.13 U	0.53 U	0.26 U	0.26 U	0.13 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.26 U	0.13 U	0.26 U	0.53 U	0.26 U
	SB-68 (23-25')	3/23/2021	23-25	0.27 U	0.27 U	0.13 U	0.54 U	0.27 U	0.27 U	0.13 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.27 U	0.13 U	0.27 U	0.54 U	0.27 U
	SB-68 (32-34')	3/23/2021	32-34	0.26 U	0.26 U	0.13 U	0.51 U	0.26 U	0.26 U	0.13 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.26 U	0.13 U	0.26 U	0.51 U	0.26 U
SB-69	SB-69 (0-0.5')	3/24/2021	0-0.5	1.4	0.20 U	0.099 U	0.40 U	0.54 I	0.20 U	0.099 U	0.20 U	0.20 U	0.22 I	0.42 I	0.24 I	0.099 U	0.099 U	0.10 I	0.099 U	0.099 U	0.20 U	0.099 U	0.20 U	0.40 U	0.20 U
	SB-69 (0.5-2')	3/24/2021	0.5-2	4.5	0.21 U	0.10 U	0.41 U	0.25 I	0.21 U	0.15 I	0.21 U	0.21 U	0.21 U	0.26 I	0.27 I	0.10 U	0.10 U	0.18 I	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.43 I	0.21 U
	SB-69 (2-4')	3/24/2021	2-4	0.41 I	0.23 U	0.11 U	0.45 U	0.23 U	0.23 U	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U	0.87 I	0.11 U	0.11 U	0.15 I	0.11 U	0.11 U	0.23 U	0.11 U	0.23 U	0.45 U	0.23 U
	SB-69 (4-6')	3/24/2021	4-6	0.22 U	0.22 U	0.11 U	0.44 U	0.22 U	0.22 U	0.11 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.44 U	0.22 U
SB-70	SB-70 (0-0.5')	3/24/2021	0-0.5	15	0.21 U	0.11 U	0.43 U	0.23 I	0.23 I	0.84	0.25 I	0.21 U	0.21 U	1.1	0.53 I	0.11 U	0.11 U	0.31 I	0.11 U	0.11 U	0.21 U	0.11 U	0.21 U	0.43 U	0.21 U
	SB-70 (0.5-2')	3/24/2021	0.5-2	0.89	0.22 U	0.11 U	0.43 U	0.22 U	0.24 I	0.11 U	0.22 U	0.22 U	0.22 U	0.54 I	0.54 I	0.11 U	0.11 U	0.19 I	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.43 U	0.22 U
	SB-70 (2-4')	3/24/2021	2-4	0.99	0.23 U	0.11 U	0.46 U	0.23 U	0.25 I	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U	1.1	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.23 U	0.11 U	0.23 U	0.46 U	0.23 U
	SB-70 (4-6')	3/24/2021	4-6	0.97 I	0.25 U	0.12 U	0.49 U	0.25 U	0.85 I	0.15 I	0.80 I	0.25 U	0.25 U	0.25 U	0.36 I	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.63 I	0.12 U	0.25 U	0.49 U	0.25 U
SB-71	SB-71 (0-0.5')	3/24/2021	0-0.5	0.67 I	0.19 U	0.095 U	0.38 U	0.19 U	0.19 U	0.095 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.19 U	0.095 U	0.19 U	0.38 U	0.19 U
	SB-71 (0.5-2')	3/24/2021	0.5-2	0.21 U	0.21 U	0.10 U	0.41 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.41 U	0.21 U
	SB-71 (2-4')	3/24/2021	2-4	0.19 U	0.19 U	0.095 U	0.38 U	0.19 U	0.19 U	0.095 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.095 U	0.095 U	0.095 U	0.095 U	0.095 U	0.19 U	0.095 U	0.19 U	0.38 U	0.19 U
	SB-71 (4-6')	3/24/2021	4-6	0.22 U	0.22 U	0.11 U	0.44 U	0.22 U	0.22 U	0.11 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.44 U	0.22 U
SB-72	SB-72 (0-0.5')	3/24/2021	0-0.5	0.38 I	0.21 U	0.10 U	0.41 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.41 U	0.21 U
	SB-72 (0.5-2')	3/24/2021	0.5-2	0.21 U	0.21 U	0.11 U	0.43 U	0.21 U	0.21 U	0.11 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.11 U	0.21 U	0.43 U	0.21 U
	SB-72 (2-4')	3/24/2021	2-4	0.19 U	0.19 U	0.097 U	0.39 U	0.19 U	0.19 U	0.097 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U	0.19 U	0.097 U	0.19 U	0.39 U	0.19 U
	SB-72 (4-6')	3/24/2021	4-6	0.21 U	0.21 U	0.11 U	0.42 U	0.21 U	0.21 U	0.11 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.11 U	0.21 U	0.42 U	0.21 U
	SB-72 (6-8')	3/24/2021	6-8	0.21 U	0.21 U	0.11 U	0.42 U	0.21 U	0.21 U	0.11 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.21 U	0.11 U	0.21 U	0.42 U	0.21 U
	SB-72 (10-12')	3/24/2021	10-12	0.20 U	0.20 U	0.10 U	0.40 U	0.20 U	0.20 U	0.10 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.40 U	0.20 U
	SB-72 (13-15')	3/24/2021	13-15	0.22 U	0.22 U	0.11 U	0.43 U	0.22 U	0.22 U	0.11 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22 U	0.11 U	0.22 U	0.43 U	0.22 U

TABLE 2: SOIL ANALYTICAL RESULTS FOR PFAS COMPOUNDS
Former Florida State Fire College

Sample Location	Sample ID	Sample Date	Sample Interval (ft BLS)	PFOS	PFOA	PFBS	PFDA	PFDoA	PFHpA	PFHxS	PFHxA	PFNA	PFTeA	PFTriA	PFUnA	NMeFOSAA	NEtFOSAA	PFDS	PFHpS	PFNS	PFPeA	PFPeS	4:2 FTS	6:2 FTS	8:2 FTS
Provisional Residential SCTL				**1,300**	**1,300**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Provisional Industrial SCTL				**25,000**	**25,000**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Provisional Leachability SCTL				**7**	**2**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SB-72	SB-72 (23-25')	3/24/2021	23-25	0.27 U	0.27 U	0.13 U	0.54 U	0.27 U	0.27 U	0.13 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.27 U	0.13 U	0.27 U	0.54 U	0.27 U
	SB-72 (33-35')	3/24/2021	33-35	1.2 I	0.34 U	0.17 U	0.69 U	0.34 U	0.34 U	0.17 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U	0.34 U	0.17 U	0.34 U	0.69 U	0.34 U
SB-73	SB-73 (0-0.5')	3/24/2021	0-0.5	0.73 I	0.20 U	0.099 U	0.40 U	0.20 U	0.20 U	0.099 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.099 U	0.099 U	0.099 U	0.099 U	0.099 U	0.20 U	0.099 U	0.20 U	0.40 U	0.20 U
	SB-73 (0.5-2')	3/24/2021	0.5-2	0.21 U	0.21 U	0.10 U	0.42 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.42 U	0.21 U
	SB-73 (2-4')	3/24/2021	2-4	0.21 U	0.21 U	0.10 U	0.41 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.27 I	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.41 U	0.21 U
	SB-73 (4-6')	3/24/2021	4-6	0.20 U	0.20 U	0.10 U	0.41 U	0.20 U	0.20 U	0.10 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 I	0.10 U	0.10 U	0.10 U	0.10 U	0.20 U	0.10 U	0.20 U	0.41 U	0.20 U
SB-74	SB-74 (0-0.5')	3/24/2021	0-0.5	0.41 I	0.21 U	0.10 U	0.41 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.41 U	0.21 U
	SB-74 (0.5-2')	3/24/2021	0.5-2	0.20 U	0.20 U	0.098 U	0.39 U	0.20 U	0.20 U	0.098 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.098 U	0.098 U	0.098 U	0.098 U	0.098 U	0.20 U	0.098 U	0.20 U	0.39 U	0.20 U
	SB-74 (2-4')	3/24/2021	2-4	0.21 U	0.21 U	0.10 U	0.41 U	0.21 U	0.21 U	0.10 U	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.21 U	0.10 U	0.21 U	0.41 U	0.21 U
	SB-74 (4-6')	3/24/2021	4-6	0.23 U	0.23 U	0.11 U	0.46 U	0.23 U	0.23 U	0.11 U	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.23 U	0.11 U	0.23 U	0.46 U	0.23 U

Notes:
1. Results and screening criteria are presented in micrograms per kilogram (µg/kg).
2. ft BLS indicates feet below land surface.
3. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
4. J indicates estimated value and/or the analysis did not meet established quality control criteria.
5. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
6. Grey shaded, bold text indicates an exceedance of the FDEP provisional leachability soil cleanup target level (SCTL).
7. "--" indicates no screening criteria.
8. PFAS indicates per- and polyfluoroalkyl substances.
9. SB-45 samples 0 to 4 ft BLS and SB-45 samples greater than 4 ft BLS were collected in separate boreholes. See Figure 11.

Analyte	Acronym
Perfluorooctane sulfonate	PFOS
Perfluorooctanoic acid	PFOA
Perfluorobutanesulfonic acid	PFBS
Perfluorodecanoic acid	PFDA
Perfluorododecanoic acid	PFDoA
Perfluoroheptanoic acid	PFHpA
Perfluorohexanesulfonic acid	PFHxS
Perfluorohexanoic acid	PFHxA
Perfluorononanoic acid	PFNA
Perfluorotetradecanoic acid	PFTeA
Perfluorotridecanoic Acid	PFTriA
Perfluoroundecanoic acid	PFUnA
N-methylperfluorooctanesulfonamidoacetic acid	NMeFOSAA
N-ethylperfluorooctanesulfonamidoacetic acid	NEtFOSAA
Perfluorodecanesulfonic acid	PFDS
Perfluoroheptanesulfonic acid	PFHpS
Perfluorononanesulfonic acid	PFNS
Perfluoropentanoic acid	PFPeA
Perfluoropentanesulfonic acid	PFPeS
4:2 Fluorotelomer sulfonate	4:2 FTS
6:2 Fluorotelemer sulfonate	6:2 FTS
8:2 Fluorotelemer sulfonate	8:2 FTS

TABLE 3: WELL CONSTRUCTION DETAILS
Former Florida State Fire College

Well ID	Date Installed	Installation Method	Type	Top of Casing Elevation (ft NAVD 88)	Total Depth (ft BLS)	Screened Interval (ft BLS)	Well Diameter (inches)	Lithology of Screened Interval
DEPMW-1 (100-120')	5/18/2021	Sonic	Permanent	73.41	120	100-120	2	Limestone; voids present
DEPMW-2 (25-45')	5/19/2021			73.51	45	25-45		Sandy clay, clayey sand 25-34'; Limestone 34-45'
DEPMW-3 (100-120')	5/19/2021			71.77	120	100-120		Clayey sand 100-105'; Marly dolomitic limestone 105-120'
DEPMW-4 (25-45')	5/20/2021			71.83	45	25-45		Sandy clay, sand 25-28'; Limestone 28-29'; Clayey sand 29-34'; Limestone 34-45'
DEPMW-5 (100-120')	5/21/2021			73.36	120	100-120		Limestone; dolomitic from 110-120'
DEPMW-6 (25-45')	5/24/2021			73.44	45	25-45		Clay 25-35'; Limestone 35-45'
DEPMW-7 (100-120')	5/25/2021			69.40	120	100-120		Limestone; soft, voids present
DEPMW-8 (20-40')	5/26/2021			69.43	40	20-40		Sandy clay 20-30'; Limestone 30-40'
VISAMW (M-200)	4/30/1989	HSA		74.97	40	30-40	4	NA
Irrigation Well	NA	NA		76.14*	140	105-140		NA

Notes:

1. ft NAVD 88 indicates feet North American Vertical Datum 1988.
2. ft BLS indicates feet below land surface.
3. HSA indicates hollow stem auger.
4. NA indicates not available.
5. * indicates manually surveyed by Geosyntec on 6-17-21.

TABLE 4: GROUNDWATER ELEVATION SUMMARY
Former Florida State Fire College

Well ID	DEPMW-1 (100-120')		DEPMW-2 (25-45')		DEPMW-3 (100-120')		DEPMW-4 (25-45')		DEPMW-5 (100-120')	
Diameter (inches)	2		2		2		2		2	
Total Depth (ft BTOC)	120		45		120		45		120	
Screen Interval (ft BTOC)	100-120		25-45		100-120		25-45		100-120	
TOC Elevation (ft NAVD)	73.41		73.51		71.77		71.83		73.36	
DATE	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**
6/14/2021	41.91	31.50	41.81	31.70	41.72	30.05	41.78	30.05	41.75	31.61

Well ID	DEPMW-6 (25-45')		DEPMW-7 (100-120')		DEPMW-8 (20-40')		VISAMW (M-200)		Irrigation Well	
Diameter (inches)	2		2		2		4		4	
Total Depth (ft BTOC)	45		120		40		40		140	
Screen Interval (ft BTOC)	25-45		100-120		20-40		30-40		105-140	
TOC Elevation (ft NAVD)	73.44		69.40		69.43		74.97		76.14*	
DATE	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**	**ELEV**	**DTW**
6/14/2021	41.81	31.63	41.84	27.56	41.89	27.54	41.84	33.13	--	--

Notes:
1. DTW indicates depth to groundwater measured in feet below top of casing (ft BTOC).
2. ELEV indicates groundwater elevation in feet relative to feet North American Vertical Datum 1988 (ft NAVD 88).
3. ft BLS indicates feet below land surface.
4. Top of casing (TOC) elevations are relative to ft NAVD 88.
5. * indicates manually surveyed by Geosyntec on 6-17-21.

TABLE 5: SCREEN POINT GROUNDWATER ANALYTICAL RESULTS FOR PFAS COMPOUNDS

Former Florida State Fire College

Sample ID	Location ID	Sample Date	Sample Interval (ft BLS)	PFOA	PFOS	PFOA + PFOS	PFBS	PFDA	PFDoA	PFHpA	PFHxS	PFHxA	PFNA	PFTeA	PFTriA	PFUnA	NMeFOSAA	NEtFOSAA	PFDS	PFHpS	PFNS	PFPeA	PFPeS	4:2 FTS	6:2 FTS	8:2 FTS
			Provisional GCTL	**70**	**70**	**70**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SP-1	SP-1 (36-40')	10/14/2020	36-40	24	**610**	**634**	25	4.8 I	2.0 U	36	130	35	40	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	4.5	0.40 U	43	16	2.0 U	41	2.0 U
SP-2	SP-2 (32-36')	10/12/2020	32-36	**120**	**5,900**	**6,020**	46	4.6 I	2.0 U	190	570	200	68	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	27	3.4	210	42	7.0 I	560	1200
	SP-2 (46-50')	3/29/2021	46-50	**1,100**	**540**	**1,640**	180	4.0 U	2.0 U	130	2200	390	4.7 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	38	0.40 U	320	210	16	530	17
	SP-2 (46-50') DUP	3/29/2021	46-50	**940**	**500**	**1,440**	180	4.0 U	2.0 U	160	2100	360	4.9 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	36	0.40 U	320	200	17	490	17
	SP-2 (66-70')	3/29/2021	66-70	**2,000**	**8,500**	**10,500**	600	4.0 U	2.0 U	1600	11000	2500	58 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	530	0.40 U	2600	730	190	13000	14
	SP-2 (86-90')	3/29/2021	86-90	**85**	**630**	**715**	30	4.0 U	2.0 U	79	420	100	3.1 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	17	0.40 U	110	33	5.5 I	390	23
SP-3	SP-3 (31-35')	10/13/2020	31-35	**260**	**3,500**	**3,760**	48	6.3 I	2.0 U	450 I	600	320	98	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	37	5.2	340	48	12	950	910
	SP-3 (31-35') DUP	10/13/2020	31-35	**250**	**3,600**	**3,850**	49	5.2 I	2.0 U	440	670	360	91	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	35	4.9	360	47	13	1000	900
	SP-3 (46-50')	3/26/2021	46-50	**140**	**1,400**	**1,540**	30	4.0 U	2.0 U	210	300	200	39	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	12	0.51 I	200	26	5.1 I	340	240
	SP-3 (66-70')	3/26/2021	66-70	**3,800**	**12,000**	**15,800**	1500	4.0 U	2.0 U	17000	13000	23000	140	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	330	0.40 U	39000	2000	760	17000	280
	SP-3 (66-70') DUP	3/26/2021	66-70	**3,900**	**14,000**	**17,900**	1600	4.0 U	2.0 U	19000	14000	26000	150	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	320	0.40 U	44000	2100	780	18000	300
	SP-3 (86-90')	3/26/2021	86-90	**640**	**2,800**	**3,440**	280	4.0 U	2.0 U	2400	2000	3400	57	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	75	0.64 I	4800	290	120	1900	210
SP-4	SP-4 (33-37')	10/12/2020	33-37	**130**	**2,700**	**2,830**	76	4.0 U	2.0 U	130	930	240	76	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	69	0.40 U	180	90	2.0 U	82	24
SP-5	SP-5 (31-35')	10/13/2020	31-35	**250**	**71,000**	**71,250**	42	41	2.0 U	320	3100	3400	6.4 I	2.0 U	2.0 U	17	8.0 U	8.0 U	300	46	680	300	73	2.0 U	4.0 U	39 I
	SP-5 (46-50')	3/29/2021	46-50	**150**	**66,000**	**66,150**	95	6.2 I	2.0 U	140	2800	4600	8.8	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	49	130	230	240	100	2.0 U	45	10
	SP-5 (66-70')	4/8/2021	66-70	**420**	**3,900**	**4,320**	560	4.0 U	2.0 U	360	4500	1400	52	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	420	0.40 U	4955	700	110	2600	42
	SP-5 (82-86')	4/8/2021	82-86	**160**	**10,000**	**10,160**	180	4.0 U	2.0 U	210	1500	1500	18	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	7.9	75	14	430	220	23	540	6.9 I
	SP-5 (82-86') DUP	4/8/2021	82-86	**120**	**4,700**	**4,820**	160	4.0 U	2.0 U	210	950	510	18	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	4.5	44	13	390	210	20	430	8.3
SP-6	SP-6 (31-35')	10/13/2020	31-35	18	**2,700**	**2,718**	28	4.0 U	2.0 U	20	290	33	7.2 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	1.9	18	1.1 I	28	21	2.0 U	4.0 U	6.8 I
SP-7	SP-7 (31-35')	10/14/2020	31-35	**97**	**930**	**1,027**	31	4.0 U	2.0 U	73	280	110	54	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.94 I	26	0.40 U	97	33	2.0 U	15 I	2.9 I
SP-8	SP-8 (32-36')	3/24/2021	32-36	21	**480**	**501**	21	4.0 U	2.0 U	25	110	29	47	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	1.3 I	5.7	1.6	28	11	2.0 U	4.0 U	2.0 U
	SP-8 (46-50')	3/24/2021	46-50	26	**260**	**286**	27	4.0 U	2.0 U	30	150	43	28	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	4.2	0.40 U	38	14	2.0 U	4.0 U	2.0 U
	SP-8 (66-70')	3/25/2021	66-70	18	**270**	**288**	18	4.0 UJ	2.0 U	26	130	26	7.6 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	3.5	0.40 U	31	17	2.0 U	4.0 U	2.0 U
	SP-8 (86-90')	3/25/2021	86-90	7.2 I	**78**	**85**	6.6	4.0 U	2.0 U	8.7	53	13	2.8 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.7 I	0.40 U	12	7.8	2.0 U	4.0 U	2.0 U
SP-9	SP-9 (31-35')	3/22/2021	31-35	22	**230**	**252**	29	4.0 U	2.0 U	23	130	30	7.2 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	2.8 I	0.40 U	28	14	2.0 U	4.0 U	2.0 U
	SP-9 (31-35') DUP	3/22/2021	31-35	22	**200**	**222**	27	4.0 U	2.0 U	24	130	31	5.6 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	2.8 I	0.40 U	25	13	2.0 U	4.0 U	2.0 U
	SP-9 (46-50')	3/22/2021	46-50	13	**160**	**173**	25	4.0 U	2.0 U	14	100	25	3.8 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	2.8	1.8 I	0.40 U	23	14	2.0 U	4.0 U	2.0 U
	SP-9 (61-65')	3/22/2021	61-65	14	**140**	**154**	25	4.0 U	2.0 U	16	91	26	5.5 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.98 I	2.0 I	0.40 U	22	12	2.0 U	4.0 U	2.0 U
SP-10	SP-10 (36-40')	3/23/2021	36-40	11	**110**	**121**	24	4.0 U	2.0 U	14	99	24	3.7 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	1.1 I	2.3 I	0.40 U	24	11	2.0 U	4.0 U	2.0 U
	SP-10 (46-50')	3/23/2021	46-50	12	**130**	**142**	23	4.0 U	2.0 U	16	94	27	4.6 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	1.3 I	2.4 I	0.40 U	25	12	2.0 U	4.0 U	2.0 U
	SP-10 (66-70')	3/23/2021	66-70	7.3 I	**150**	**157**	15	4.0 U	2.0 U	7.1 I	110	15	3.4 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	2.3	4.4	0.40 U	12	14	2.0 U	4.0 U	2.0 U
	SP-10 (86-90')	3/23/2021	86-90	14	**180**	**194**	25	4.0 U	2.0 U	16	96	30	3.5 I	2.0 U	2.0 U	2.0 U	0.80 UJ	0.80 U	0.64 I	2.2 I	0.40 U	26	13	2.0 U	4.0 U	2.0 U
SP-11	SP-11 (31-35')	3/30/2021	31-35	9.0	**74**	**83**	13	4.0 U	2.0 U	7.5 I	44	11	2.0 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	0.97 I	0.40 U	12	5.8	2.0 U	4.0 U	2.0 U
	SP-11 (46-50')	3/30/2021	46-50	8.0 I	**91**	**99**	22	4.0 U	2.0 U	6.0 I	92	13	2.0 U	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.2 I	0.40 U	11	12	2.0 U	4.0 U	2.0 U
	SP-11 (66-70')	3/30/2021	66-70	5.4 I	**130**	**135**	8.6	4.0 U	2.0 U	4.9 I	34	9.3	2.0 U	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	0.94 I	0.40 U	7.8 I	4.3	2.0 U	6.4 I	2.0 U
	SP-11 (81-85')	3/30/2021	81-85	9.0	**110**	**119**	14	4.0 U	2.0 U	7.4 I	56	15	2.6 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.5 I	0.40 U	12	9.3	2.0 U	9.4 I	5.6 I
SP-12	SP-12 (36-40')	4/1/2021	36-40	5.9 I	**75**	**81**	12	4.0 U	2.0 U	6.3 I	65	8.7	2.0 U	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.6 I	0.40 U	6.4 I	8.0	2.0 U	4.0 U	2.0 U
	SP-12 (36-40') DUP	4/1/2021	36-40	5.7 I	**72**	**78**	12	4.0 U	2.0 U	5.6 I	66	9.2	2.0 U	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.5 I	0.40 U	6.7 I	7.7	2.0 U	4.0 U	2.0 U
	SP-12 (46-50')	4/1/2021	46-50	3.5 I	66 J	70	11	4.0 U	2.0 U	4.3 I	57	7.5 I	2.0 U	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.0 I	0.40 U	5.6 I	7.9	2.0 U	4.0 U	2.0 U
	SP-12 (66-70')	4/1/2021	66-70	4.6 I	**110**	**115**	11	4.0 U	2.0 U	4.3 I	47	9.0	2.0 U	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.4 I	0.40 U	6.2 I	5.6	2.0 U	4.0 U	2.0 U
SP-13	SP-13 (46-50')	4/1/2021	46-50	3.7 I	**110**	**114**	8.9	4.0 U	2.0 U	4.4 I	52	8.3	2.1 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.4 I	0.40 U	4.6 I	5.5	2.0 U	4.0 U	2.0 U
	SP-13 (66-70')	4/1/2021	66-70	10	**190**	**200**	19	4.0 U	2.0 U	12	150	26	2.0 U	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	5.8	0.40 U	15	19	2.0 U	4.0 U	2.0 U
SP-14	SP-14 (36-40')	4/5/2021	36-40	2.0 U	4.5 I	7	1.9	4.0 U	2.0 U	2.0 U	1.6 I	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	0.80 U	0.40 U	2.0 U	0.40 U	2.0 U	4.0 U	2.0 U
	SP-14 (46-50')	4/5/2021	46-50	25 UJ	25 UJ	50	5.0 UJ	50 UJ	25 UJ	25 UJ	10 UJ	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	10 UJ	10 UJ	5.0 UJ	10 UJ	5.0 UJ	25 UJ	5.0 UJ	25 UJ	50 UJ	25 UJ
	SP-14 (46-50') DUP	4/5/2021	46-50	25 UJ	25 UJ	50	5.0 UJ	50 UJ	25 UJ	25 UJ	10 UJ	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	10 UJ	10 UJ	5.0 UJ	10 UJ	5.0 UJ	25 UJ	5.0 UJ	25 UJ	50 UJ	25 UJ
	SP-14 (66-70')	4/5/2021	66-70	25 UJ	25 UJ	50	5.0 UJ	50 UJ	25 UJ	25 UJ	10 UJ	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	10 UJ	10 UJ	5.0 UJ	10 UJ	5.0 UJ	25 UJ	5.0 UJ	25 UJ	50 UJ	25 UJ
	SP-14 (86-90')	4/5/2021	86-90	25 UJ	25 UJ	50	5.0 UJ	50 UJ	25 UJ	25 UJ	10 UJ	25 UJ	25 UJ	25 UJ	25 UJ	25 UJ	10 UJ	10 UJ	5.0 UJ	10 UJ	5.0 UJ	25 UJ	5.0 UJ	25 UJ	50 UJ	25 UJ
SP-15	SP-15 (41-45')	3/25/2021	41-45	48	**3,600**	**3,648**	58	4.0 U	2.0 U	35	520	190	8.5	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	36	0.62 I	62	61	2.0 U	100	20
	SP-15 (46-50')	3/25/2021	46-50	**100**	**7,800**	**7,900**	110	4.0 U	2.0 U	56	1100	430	18	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	78	1.6	97	120	2.0 U	110	40
	SP-15 (46-50') DUP	3/25/2021	46-50	**88**	**8,700**	**8,788**	100	4.0 U	2.0 U	60	1200	400	19	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	81	1.7	98	120	2.0 U	96	40
	SP-15 (66-70')	3/25/2021	66-70	**180**	**5,000**	**5,180**	240	4.0 U	2.0 U	160	1700	410	20	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	120	0.40 U	250	250	5.2 I	300	30
	SP-15 (86-90')	3/25/2021	86-90	**88**	**550**	**638**	98	4.0 U	2.0 U	150	360	310	27	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	36	0.40 U	370	140	9.5	410	7.2 I
SP-16	SP-16 (36-40')	4/6/2021	36-40	50	**1,800**	**1,850**	46	4.0 U	2.0 U	65	510	130	14	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	28	0.40 U	78	54	2.0 U	120	46
	SP-16 (46-50')	4/6/2021	46-50	**120**	**1,300**	**1,420**	110	4.0 U	2.0 U	180	780	310	25	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	28	0.40 U	370	120	7.1 I	300	50
	SP-16 (66-70')	4/6/2021	66-70	**130**	**2,500**	**2,630**	120	4.0 U	2.0 U	170	1300	320	30	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	71	0.40 U	260	150	3.2 I	340	52
	SP-16 (78-82')	4/6/2021	78-82	57	**540**	**597**	60	4.0 U	2.0 U	100	470	180	16	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	20	0.40 U	230	66	2.0 U	120	7.0 I
SP-17	SP-17 (36-40')	3/31/2021	36-40	11	**520**	**531**	18	4.0 U	2.0 U	13	220	28	3.5 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	6.9	0.40 U	12	15	2.0 U	11 I	2.5 I
	SP-17 (46-50')	3/31/2021	46-50	20	**1,200**	**1,220**	29	4.0 U	2.0 U	21	390	62	6.4 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	13	0.40 U	22	24	2.0 U	28	8.6
	SP-17 (66-70')	3/31/2021	66-70	24	**440**	**464**	33	4.0 U	2.0 U	35	290	71	4.6 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	12	0.40 U	65	34	2.0 U	17	2.0 U
	SP-17 (82-86')	3/31/2021	82-86	15	**510**	**525**	23	4.0 U	2.0 U	21	240	58	4.3 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	8.0	0.40 U	34	21	2.0 U	10 I	4.2 I
SP-18	SP-18 (36-40')	4/6/2021	36-40	59	**2,000**	**2,059**	40	4.0 U	2.0 U	89	500	140	25	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	21	0.93 I	110	46	2.0 U	120	150
	SP-18 (46-50')	4/6/2021	46-50	**270**	**2,600**	**2,870**	120	4.0 U	2.0 U	400	1500	560	74	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	62	0.40 U	590	150	3.5 I	690	120
	SP-18 (66-70')	4/6/2021	66-70	2.0 U	56	58	0.64 I	4.0 U	2.0 U	2.0 U	6.4	2.6 I	2.0 U	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	0.80 U	0.40 U	2.6 I	0.69 I	2.0 U	4.4 I	3.3 I
	SP-18 (82-86')	4/6/2021	82-86	2.0 U	30	32	0.78 I	4.0 U	2.0 U	2.0 U	6.7	2.3 I	2.0 U	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	0.80 U	0.40 U	2.2 I	0.96 I	2.0 U	4.0 U	2.0 U
SP-19	SP-19 (35-39')	3/23/2021	35-39	9.3	**100**	**109**	12	4.0 U	2.0 U	9.1	69	14	3.2 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.5 I	0.40 U	13	7.1	2.0 U	4.0 U	2.0 U
	SP-19 (46-50')	3/23/2021	46-50	7.3 I	**80**	**87**	13	4.0 U	2.0 U	6.9 I	54	12	2.8 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	4.6	1.3 I	0.40 U	9.6	7.2	2.0 U	4.0 U	2.0 U
	SP-19 (66-70')	3/23/2021	66-70	3.0 I	49	52	8.6	4.0 U	2.0 U	3.6 I	37	10	2.2 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	2.3	0.80 U	0.40 U	6.5 I	3.8	2.0 U	4.0 U	2.0 U
	SP-19 (86-90')	3/23/2021	86-90	7.8 I	**80**	**88**	11	4.0 U	2.0 U	7.6 I	55	15	2.1 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	1.1 I	1.4 I	0.40 U	10	5.2	2.0 U	4.0 U	2.0 U
SP-20	SP-20 (36-40')	4/7/2021	36-40	**130**	**3,100**	**3,230**	51	5.5 I	2.0 U	190	860	270	44	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	38	0.40 U	220	61	2.2 I	530	180
	SP-20 (46-50')	4/7/2021	46-50	**110**	**2,400**	**2,510**	39	4.2 I	2.0 U	150	640	210	36	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	30	0.40 U	160	45	2.0 U	400	140
	SP-20 (66-70')	4/7/2021	66-70	**97**	**2,000**	**2,097**	42	4.0 U	2.0 U	140	560	190	26	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	29	0.40 U	170	46	3.1 I	320	83
	SP-20 (86-90')	4/7/2021	86-90	48	**650**	**698**	22	4.0 U	2.0 U	64	310	110	13	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	13	0.40 U	83	22	2.1 I	180	37
SP-21	SP-21 (36-40')	4/7/2021	36-40	9.3	**150**	**159**	13	4.0 U	2.0 U	15	96	23	4.3 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	2.7 I	0.40 U	25	13	2.0 U	4.0 U	2.0 U
	SP-21 (46-50')	4/7/2021	46-50	11	**140**	**151**	15	4.0 U	2.0 U	19	89	25	5.0 I	2.0 U	2.0 U	2.8 I	0.80 U	0.80 U	0.40 U	2.3 I	0.40 U	28	12	2.0 U	4.0 U	2.0 U
	SP-21 (66-70')	4/7/2021	66-70	11	**120**	**131**	13	4.0 U	2.0 U	16	94	22	3.9 I	2.0 U	2.0 U	2.0 I	0.80 U	0.80 U	0.40 U	2.7 I	0.40 U	25	12	2.0 U	4.0 U	2.0 U
	SP-21 (86-90')	4/7/2021	86-90	10	**160**	**170**	17	4.0 U	2.0 U	18	110	30	4.4 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	2.7 I	0.40 U	31	14	2.0 U	4.0 U	2.0 U

TABLE 5: SCREEN POINT GROUNDWATER ANALYTICAL RESULTS FOR PFAS COMPOUNDS

Former Florida State Fire College

Sample ID	Location ID	Sample Date	Sample Interval (ft BLS)	PFOA	PFOS	PFOA + PFOS	PFBS	PFDA	PFDoA	PFHpA	PFHxS	PFHxA	PFNA	PFTeA	PFTriA	PFUnA	NMeFOSAA	NEtFOSAA	PFDS	PFHpS	PFNS	PFPeA	PFPeS	4:2 FTS	6:2 FTS	8:2 FTS
			Provisional GCTL	**70**	**70**	**70**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
SP-22	SP-22 (36-40')	3/31/2021	36-40	**94**	**250**	**344**	14	4.0 U	2.0 U	36	110	40	12	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	3.1 I	0.40 U	33	12	2.0 U	4.0 U	2.0 U
	SP-22 (46-50')	3/31/2021	46-50	37	**150**	**187**	15	4.0 U	2.0 U	24	97	29	7.6 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.8 I	0.40 U	23	11	2.0 U	4.0 U	2.0 U
	SP-22 (66-70')	3/31/2021	66-70	43	**140**	**183**	12	4.0 U	2.0 U	26	76	28	7.7 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.7 I	0.40 U	23	9.1	2.0 U	4.0 U	2.0 U
	SP-22 (86-90')	3/31/2021	86-90	67	36	**103**	14	4.0 U	2.0 U	37	58	48	8.0	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	0.80 U	0.40 U	38	5.1	2.0 U	4.0 U	2.0 U
	SP-22 (86-90') DUP	3/31/2021	86-90	70	40	**110**	14	4.0 U	2.0 U	39	59	51	8.2	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	0.80 U	0.40 U	37	5.1	2.0 U	4.0 U	2.0 U
SP-23	SP-23 (36-40')	4/5/2021	36-40	4.9 I	49	54	11	4.0 U	2.0 U	5.9 I	44	11	2.2 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.1 I	0.40 U	13	7.5	2.0 U	4.0 U	2.0 U
	SP-23 (46-50')	4/8/2021	46-50	6.3 I	**88**	**94**	16	4.0 U	2.0 U	8.9	71	18	3.0 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.7 I	0.40 U	19	12	2.0 U	4.0 U	2.0 U
	SP-23 (66-70')	4/8/2021	66-70	8.8	**86**	**95**	20	4.0 U	2.0 U	10	69	19	3.6 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.5 I	0.40 U	20	11	2.0 U	4.0 U	2.0 U
	SP-23 (66-70') DUP	4/8/2021	66-70	9.5	**85**	**95**	20	4.0 U	2.0 U	9.1	67	20	3.6 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.5 I	0.40 U	21	11	2.0 U	4.0 U	2.0 U
	SP-23 (78-82')	4/8/2021	78-82	2.0 U	5.1 I	7	0.67 I	4.0 U	2.0 U	2.0 U	1.7 I	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	0.80 U	0.40 U	2.0 U	0.40 U	2.0 U	4.0 U	2.0 U
SP-24	SP-24 (36-40')	4/2/2021	36-40	29	**610**	**639**	17	4.0 U	2.0 U	45	190	75	9.6	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	5.8	0.40 U	53	13	2.0 U	70	33
	SP-24 (46-50')	4/2/2021	46-50	44	**720**	**764**	20	4.0 U	2.0 U	63	300	90	12	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	9.0	0.40 U	75	23	2.0 U	120	29
	SP-24 (66-70')	4/2/2021	66-70	**72**	**690**	**762**	31	4.0 U	2.0 U	94	430	170	16	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	16	0.40 U	170	33	2.0 I	220	29
	SP-24 (78-82')	4/2/2021	78-82	41	**790**	**831**	20	4.0 U	2.0 U	59	300	89	13	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	12	0.40 U	77	19	2.0 U	120	32
SP-25	SP-25 (36-40')	3/30/2021	36-40	7.3 I	11	18	1.5 I	4.0 U	2.0 U	7.2 I	2.4 I	8.8	2.3 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	0.80 U	0.40 U	13	0.40 U	2.0 U	4.0 U	2.0 U
	SP-25 (46-50')	3/30/2021	46-50	6.7 I	13	20	1.4 I	4.0 U	2.0 U	8.4	2.3 I	11	2.1 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	0.80 U	0.40 U	15	0.40 U	2.0 U	4.0 U	2.0 U
	SP-25 (66-70')	3/30/2021	66-70	9.9	23	33	2.0	4.0 U	2.0 U	13	4.0	12	2.8 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	0.80 U	0.40 U	14	0.40 U	2.0 U	4.0 U	2.0 U

Notes:

1. Results and screening criteria are presented in nanograms per liter (ng/L).
2. ft BLS indicates feet below land surface.
3. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
4. J indicates estimated value and/or the analysis did not meet established quality control criteria.
5. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
6. PFOA + PFOS indicates the summation of PFOA and PFOS.
7. Blue shaded, bold text indicates an exceedance of the Florida Department of Environmental Protection provisional groundwater cleanup target level (GCTL).
8. -- indicates no screening criteria.
9. PFAS indicates per- and polyfluoroalkyl substances.

Analyte	Acronym
Perfluorooctane sulfonate	PFOS
Perfluorooctanoic acid	PFOA
Perfluorobutanesulfonic acid	PFBS
Perfluorodecanoic acid	PFDA
Perfluorododecanoic acid	PFDoA
Perfluoroheptanoic acid	PFHpA
Perfluorohexanesulfonic acid	PFHxS
Perfluorohexanoic acid	PFHxA
Perfluorononanoic acid	PFNA
Perfluorotetradecanoic acid	PFTeA
Perfluorotridecanoic Acid	PFTriA
Perfluoroundecanoic acid	PFUnA
N-methylperfluorooctanesulfonamidoacetic acid	NMeFOSAA
N-ethylperfluorooctanesulfonamidoacetic acid	NEtFOSAA
Perfluorodecanesulfonic acid	PFDS
Perfluoroheptanesulfonic acid	PFHpS
Perfluorononanesulfonic acid	PFNS
Perfluoropentanoic acid	PFPeA
Perfluoropentanesulfonic acid	PFPeS
4:2 Fluorotelomer sulfonate	4:2 FTS
6:2 Fluorotelemer sulfonate	6:2 FTS
8:2 Fluorotelemer sulfonate	8:2 FTS

TABLE 6: MONITORING WELL GROUNDWATER ANALYTICAL RESULTS FOR PFAS COMPOUNDS

Former Florida State Fire College

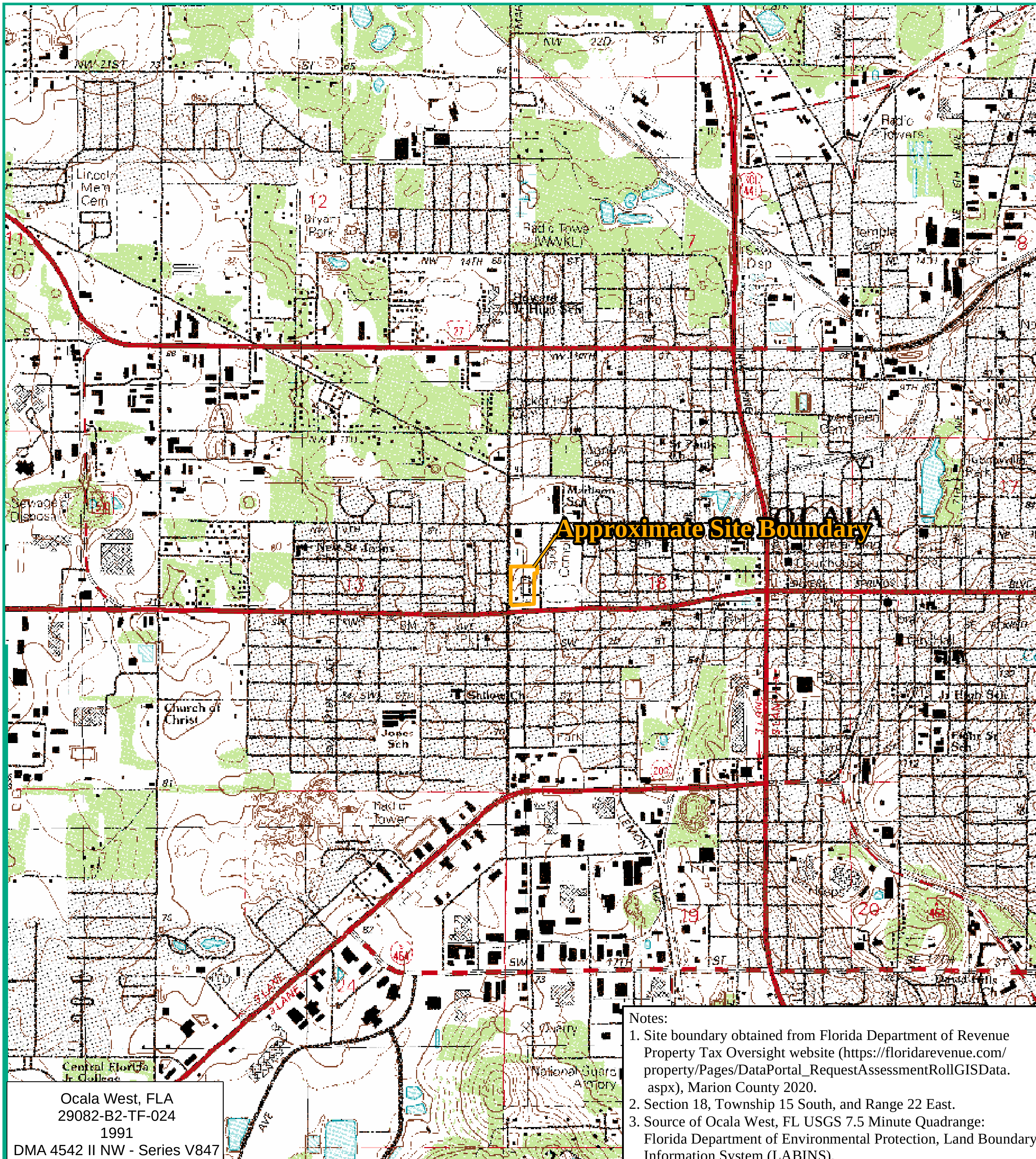
Sample ID	Location ID	Sample Date	Sample Interval (ft BLS)	PFOA	PFOS	PFOA + PFOS	PFBS	PFDA	PFDoA	PFHpA	PFHxS	PFHxA	PFNA	PFTeA	PFTriA	PFUnA	NMeFOSAA	NEtFOSAA	PFDS	PFHpS	PFNS	PFPeA	PFPeS	4:2 FTS	6:2 FTS	8:2 FTS
			Provisional GCTL	**70**	**70**	**70**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
DEPMW-1	DEPMW-1 (100-120')	6/14/2021	100-120	12	**100**	**112**	13	4.0 U	2.0 U	16	73	26	4.2 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.7 I	0.40 U	26	9.5	2.0 U	16 U	2.0 U
DEPMW-2	DEPMW-2 (25-45')	6/14/2021	25-45	5.2 I	**100**	**105**	15	4.0 U	2.0 U	8.2	75	16	2.7 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.2 I	0.40 U	12	13	2.0 U	16 U	2.0 U
DEPMW-3	DEPMW-3 (100-120')	6/14/2021	100-120	22	**95**	**117**	13	4.0 U	2.0 U	35	130	54	2.2 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	2.4 I	0.40 U	63	19	2.0 U	16 U	2.0 U
DEPMW-4	DEPMW-4 (25-45')	6/14/2021	25-45	2.0 U	5.9 I	7.9	0.85 I	4.0 U	2.0 U	2.0 U	2.1 I	3.1 I	2.0 U	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	0.80 U	0.40 U	2.2 I	0.40 U	2.0 U	16 U	2.0 U
DEPMW-5	DEPMW-5 (100-120')	6/14/2021	100-120	20	**420**	**440**	22	4.0 U	2.0 U	25	210	46	6.0 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	4.5	0.45 I	44	20	2.0 U	16 U	2.0 U
DEPMW-6	DEPMW-6 (25-45')	6/14/2021	25-45	12	**530**	**542**	20	4.0 U	2.0 U	15	260	35	3.5 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	5.7	0.40 U	17	14	2.0 U	16 U	2.3 I
DEPMW-7	DEPMW-7 (100-120')	6/14/2021	100-120	12	**87**	**99**	15	4.0 U	2.0 U	14	79	26	3.5 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.4 I	0.40 U	25	10	2.0 U	16 U	2.0 U
DEPMW-8	DEPMW-8 (20-40')	6/14/2021	20-40	49	**11,000**	**11,049**	49	6.8 I	2.0 U	39	1400	160	14	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	58	5.6	58	64	2.0 U	16 U	4.2 I
	DEPMW-8 (20-40') DUP	6/14/2021	20-40	46	**12,000**	**12,046**	48	6.4 I	2.0 U	38	1600	160	13	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	57	5.5	58	64	2.0 U	16 U	4.2 I
VISAMW (M-200)	VISAMW (M-200)	6/14/2021	30-40	5.4 I	**140**	**145**	11	4.0 U	2.0 U	4.0 I	64	9.3	2.0 U	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.1 I	0.40 U	6.2 I	7.8	2.0 U	16 U	2.0 U
Irrigation Well	Irrigation Well	3/23/2021	105-140	9.7	**110**	**120**	16	4.0 U	2.0 U	15	91	23	4.1 I	2.0 U	2.0 U	2.0 U	0.80 U	0.80 U	0.40 U	1.4 I	0.40 U	24	12	2.0 U	4.0 U	2.0 U

Notes:

1. Results and screening criteria are presented in nanograms per liter (ng/L).
2. ft BLS indicates feet below land surface.
3. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
4. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
5. PFOA + PFOS indicates the summation of PFOA and PFOS.
6. Blue shaded, bold text indicates an exceedance of the Florida Department of Environmental Protection provisional groundwater cleanup target level (GCTL).
7. -- indicates no screening criteria.
8. PFAS indicates per- and polyfluoroalkyl substances.

Analyte	Acronym
Perfluorooctane sulfonate	PFOS
Perfluorooctanoic acid	PFOA
Perfluorobutanesulfonic acid	PFBS
Perfluorodecanoic acid	PFDA
Perfluorododecanoic acid	PFDoA
Perfluoroheptanoic acid	PFHpA
Perfluorohexanesulfonic acid	PFHxS
Perfluorohexanoic acid	PFHxA
Perfluorononanoic acid	PFNA
Perfluorotetradecanoic acid	PFTeA
Perfluorotridecanoic Acid	PFTriA
Perfluoroundecanoic acid	PFUnA
N-methylperfluorooctanesulfonamidoacetic acid	NMeFOSAA
N-ethylperfluorooctanesulfonamidoacetic acid	NEtFOSAA
Perfluorodecanesulfonic acid	PFDS
Perfluoroheptanesulfonic acid	PFHpS
Perfluorononanesulfonic acid	PFNS
Perfluoropentanoic acid	PFPeA
Perfluoropentanesulfonic acid	PFPeS
4:2 Fluorotelomer sulfonate	4:2 FTS
6:2 Fluorotelemer sulfonate	6:2 FTS
8:2 Fluorotelemer sulfonate	8:2 FTS

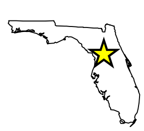
FIGURES



Ocala West, FLA
29082-B2-TF-024
1991
DMA 4542 II NW - Series V847

Notes:
1. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
2. Section 18, Township 15 South, and Range 22 East.
3. Source of Ocala West, FL USGS 7.5 Minute Quadrange: Florida Department of Environmental Protection, Land Boundary Information System (LABINS).

Figure 1
USGS Site Topographic Map
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida



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2,000 Feet

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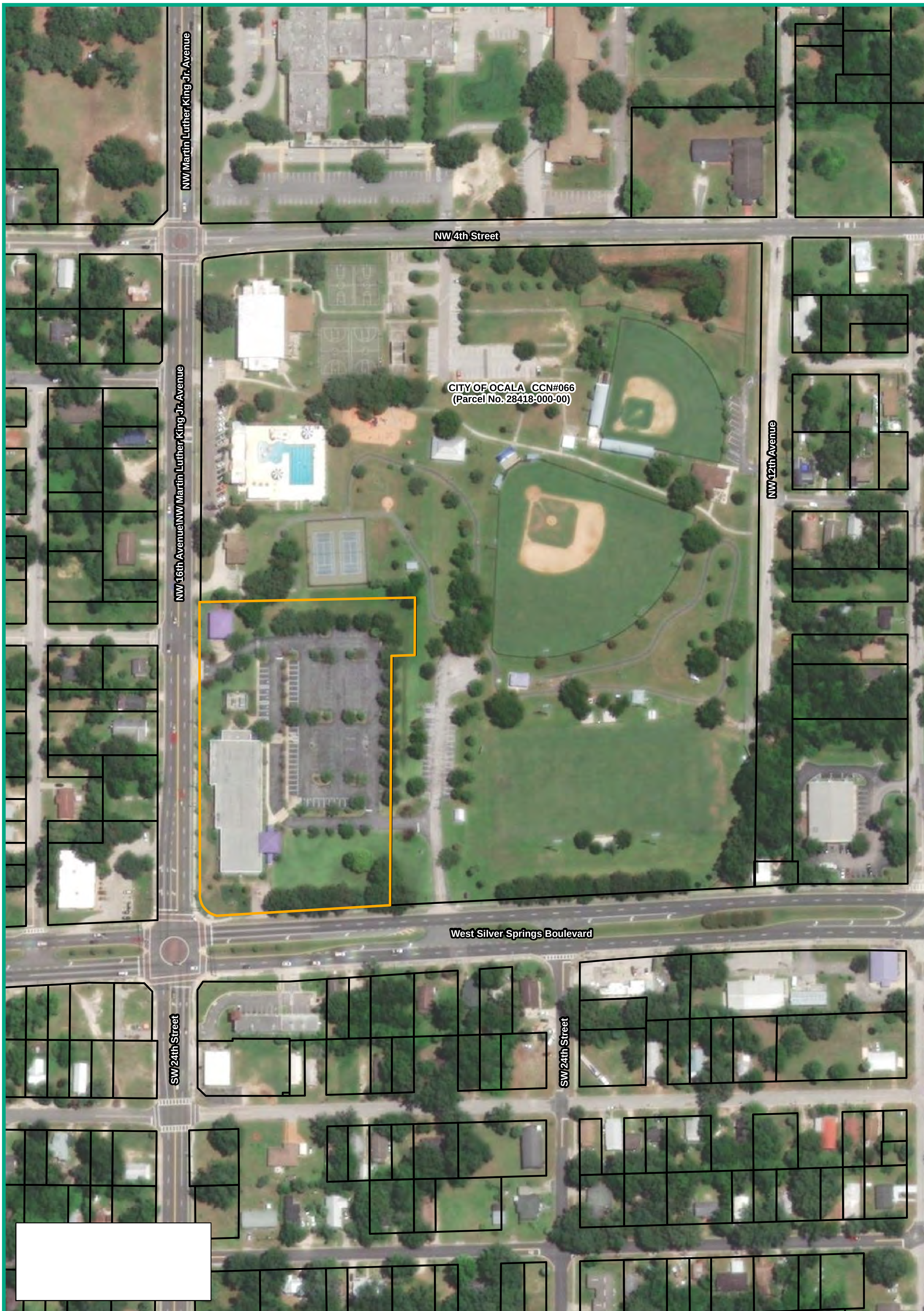

Figure 2
Site Vicinity
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Site and parcel boundaries obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
2. 2019 World Imagery Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 23, 2021

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160
Feet

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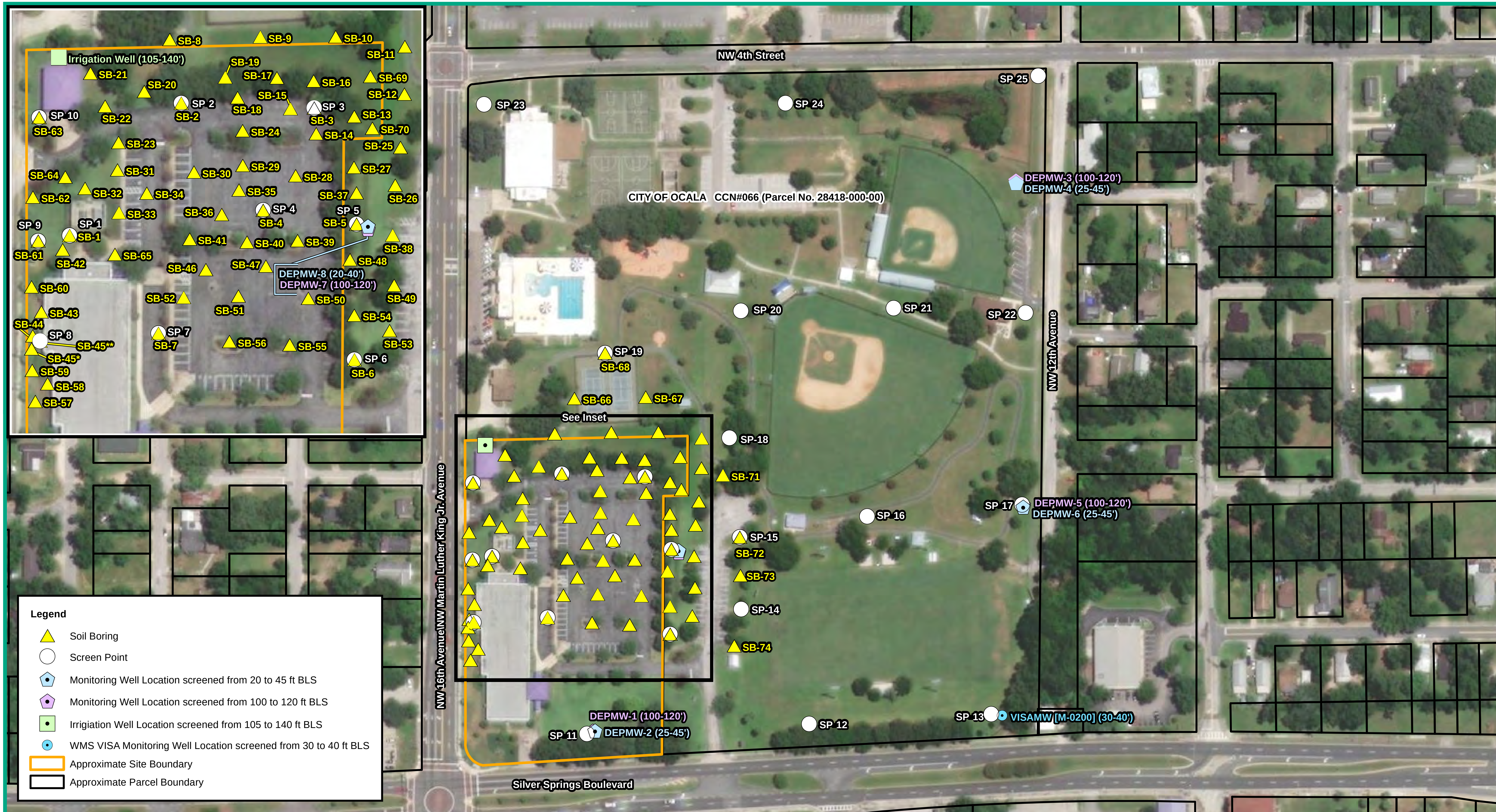

Figure 3
Sampling Locations
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. ft BLS indicates feet below land surface.
2. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
3. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
4. Site and parcel boundaries obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
5. 2019 World Imagery Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 23, 2021

N

160 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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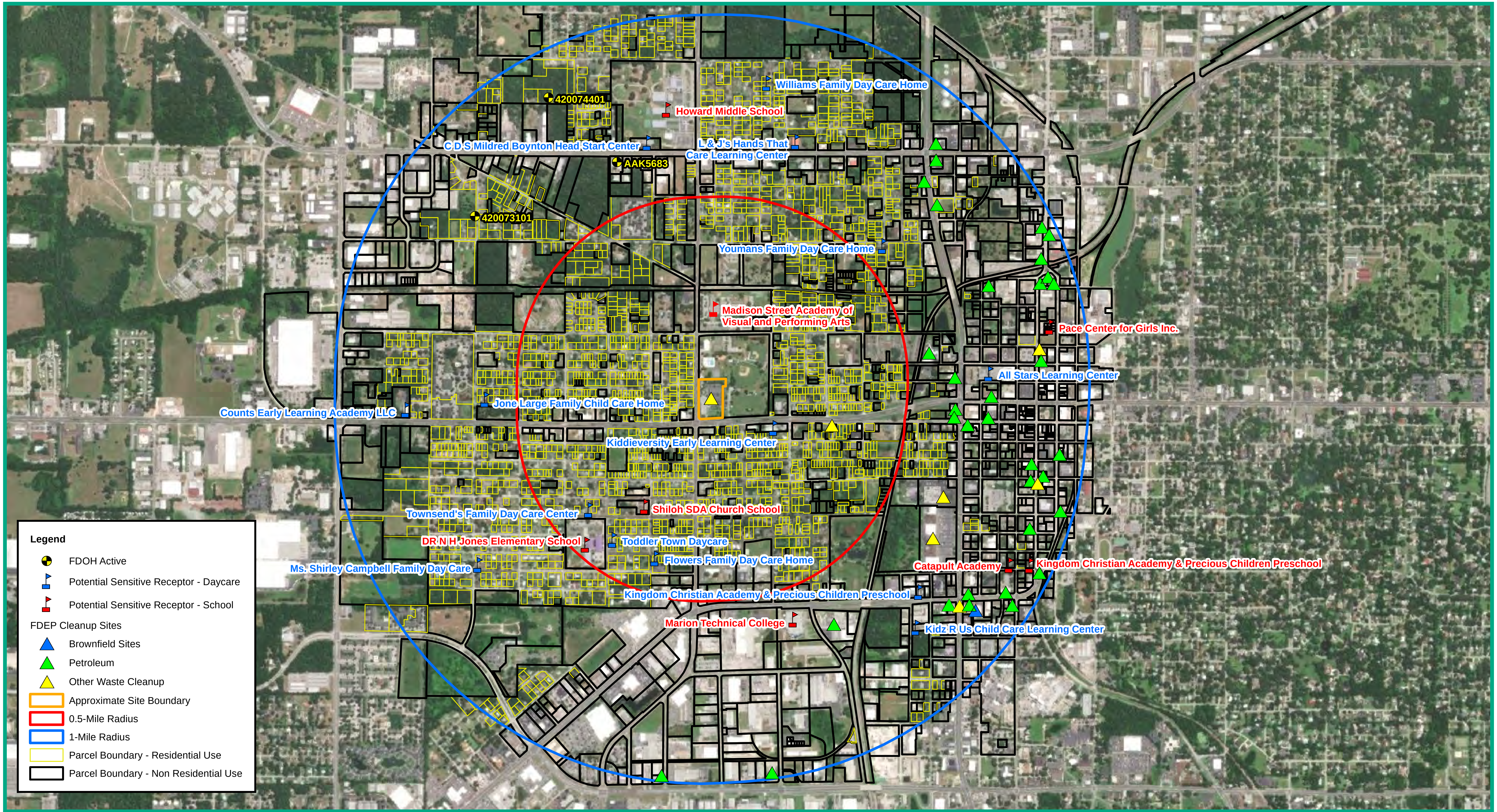

Figure 4
Water Wells and Potential Receptors Within a 1-Mile Radius
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Source of Florida Department of Health (FDOH) wells: well surveillance program data download dated 17 August 2020.
2. Active indicates the well is used on a regular basis or will be used within a reasonable period of time (2-3 months).
3. Florida Department of Environmental Protection (FDEP) Cleanup Sites obtained from FDEP Open Data Portal, dated 19 November 2020.
4. Site and parcel boundaries obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
5. 2019 World Imagery Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: August 05, 2021

N

1,300 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Figure 5
Site Location Map
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. ft BLS indicates feet below land surface.
2. Historic site features provided by Florida Department of Environmental Protection (FDEP).
3. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
4. 2019 World Imagery Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 23, 2021

N

50 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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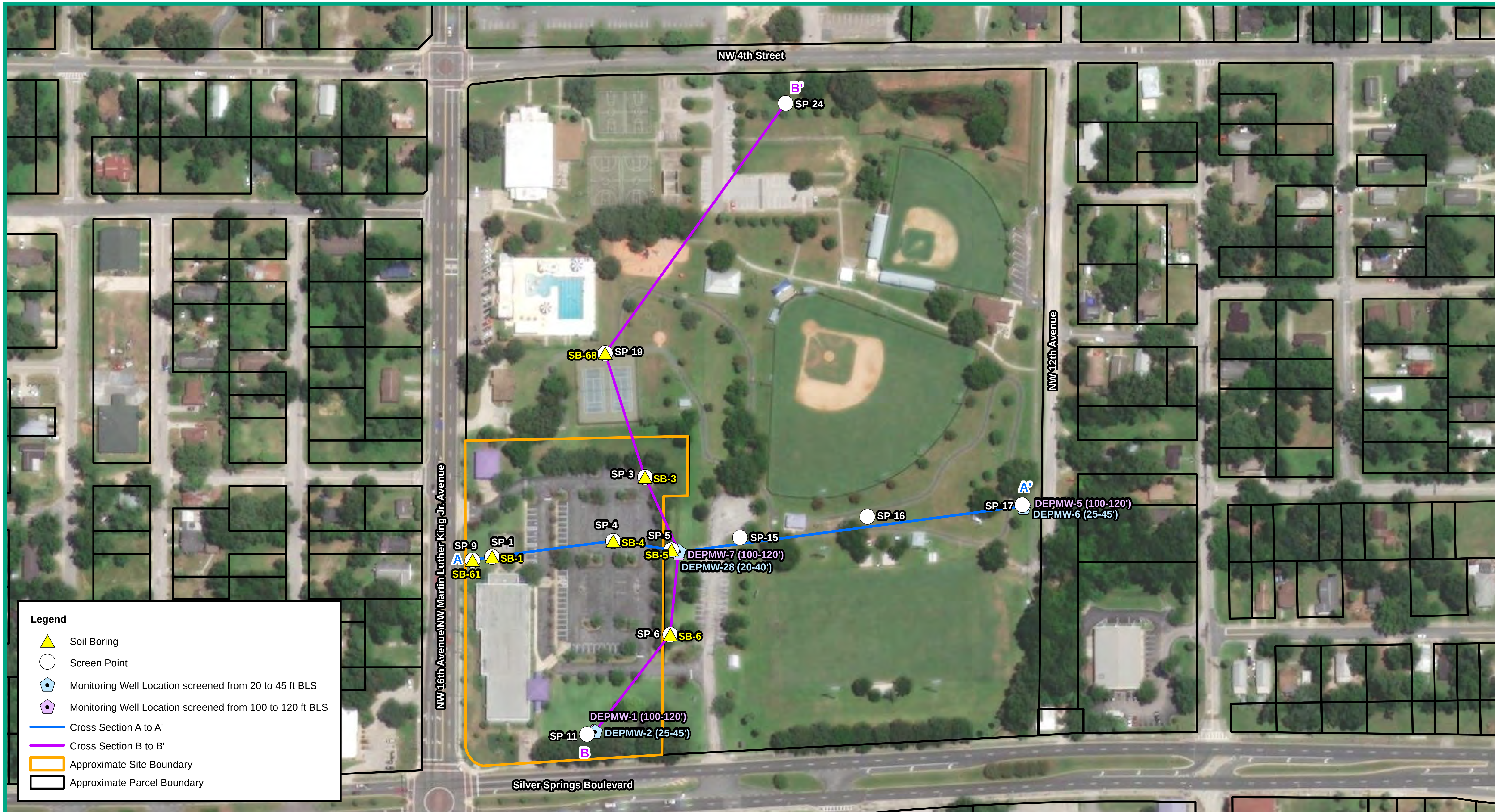


Figure 6
Cross Section Transect Layout
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. ft BLS indicates feet below land surface.
2. Only locations on cross section transects are presented.
3. Site and parcel boundaries obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
4. 2019 World Imagery Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 23, 2021

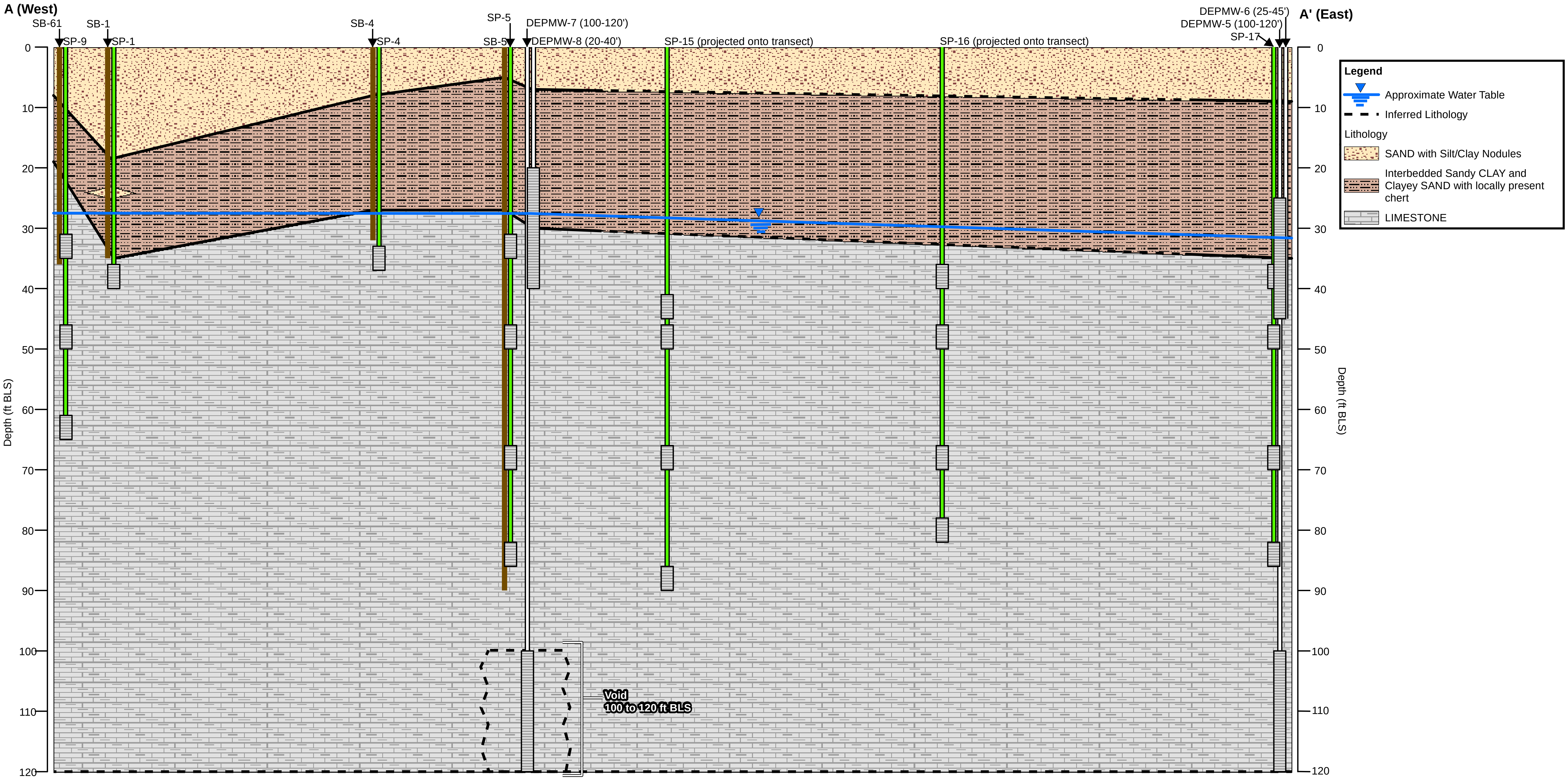


Figure 7
Cross Section A-A'
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Note:
ft BLS indicates feet below land surface.

Date: July 30, 2021

Soil Boring | Screen Point | Monitoring Well

Screen Interval

N

80 Feet

Vertical Exaggeration = 5

Path: (Titusville-01\DATA) T:\0GIS\FR7522_FormerFSFC\MXDs\202107\CrossSection_AA_202107.mxd 30 July 2021. Last Edited by: mhensley

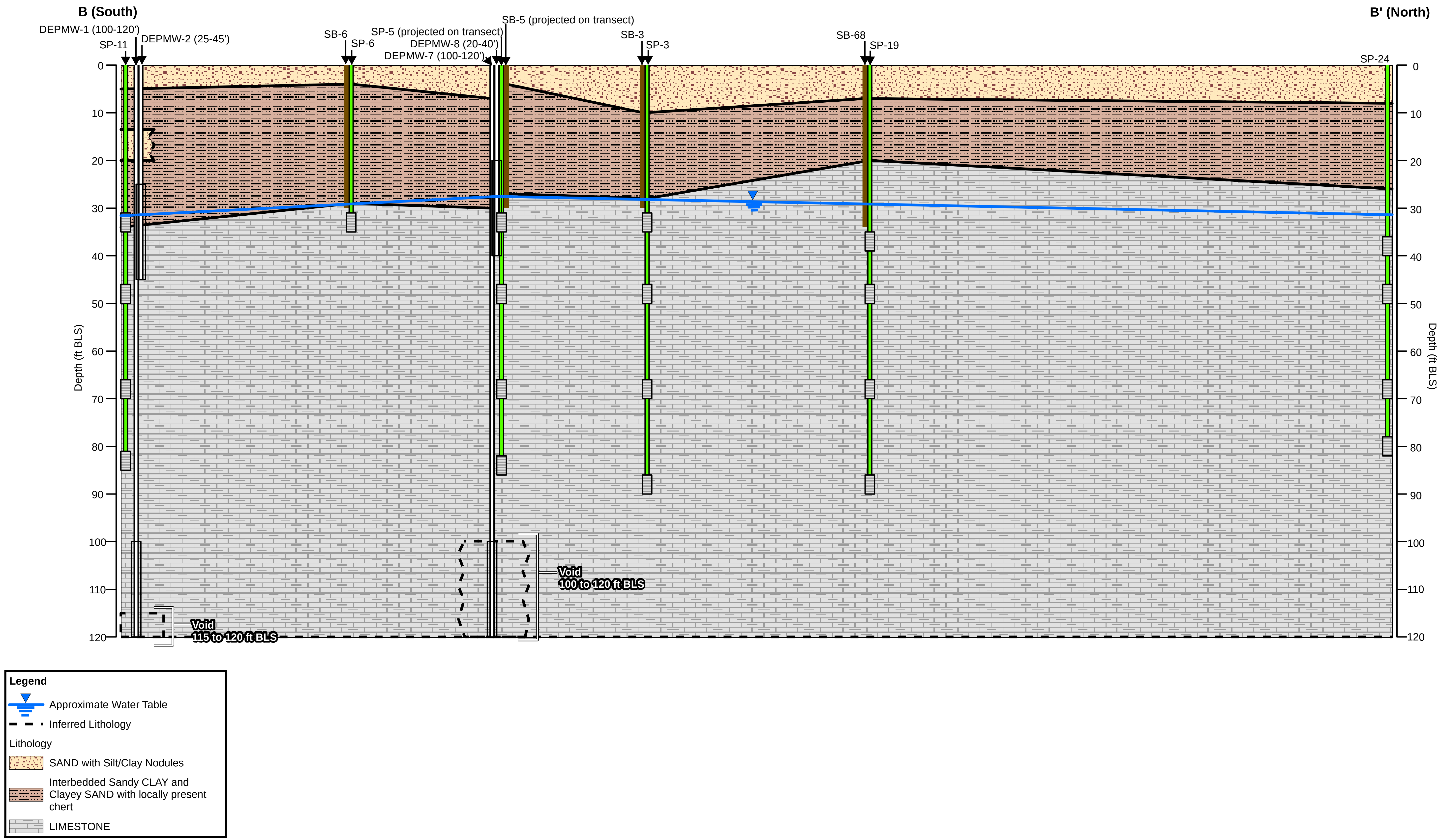


Figure 8
Cross Section B-B'
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Note:
ft BLS indicates feet below land surface.

Date: July 23, 2021

Soil Boring
Screen Point
Screen Interval
Monitoring Well
Screen Interval

N
100
Feet
Vertical Exaggeration = 5

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

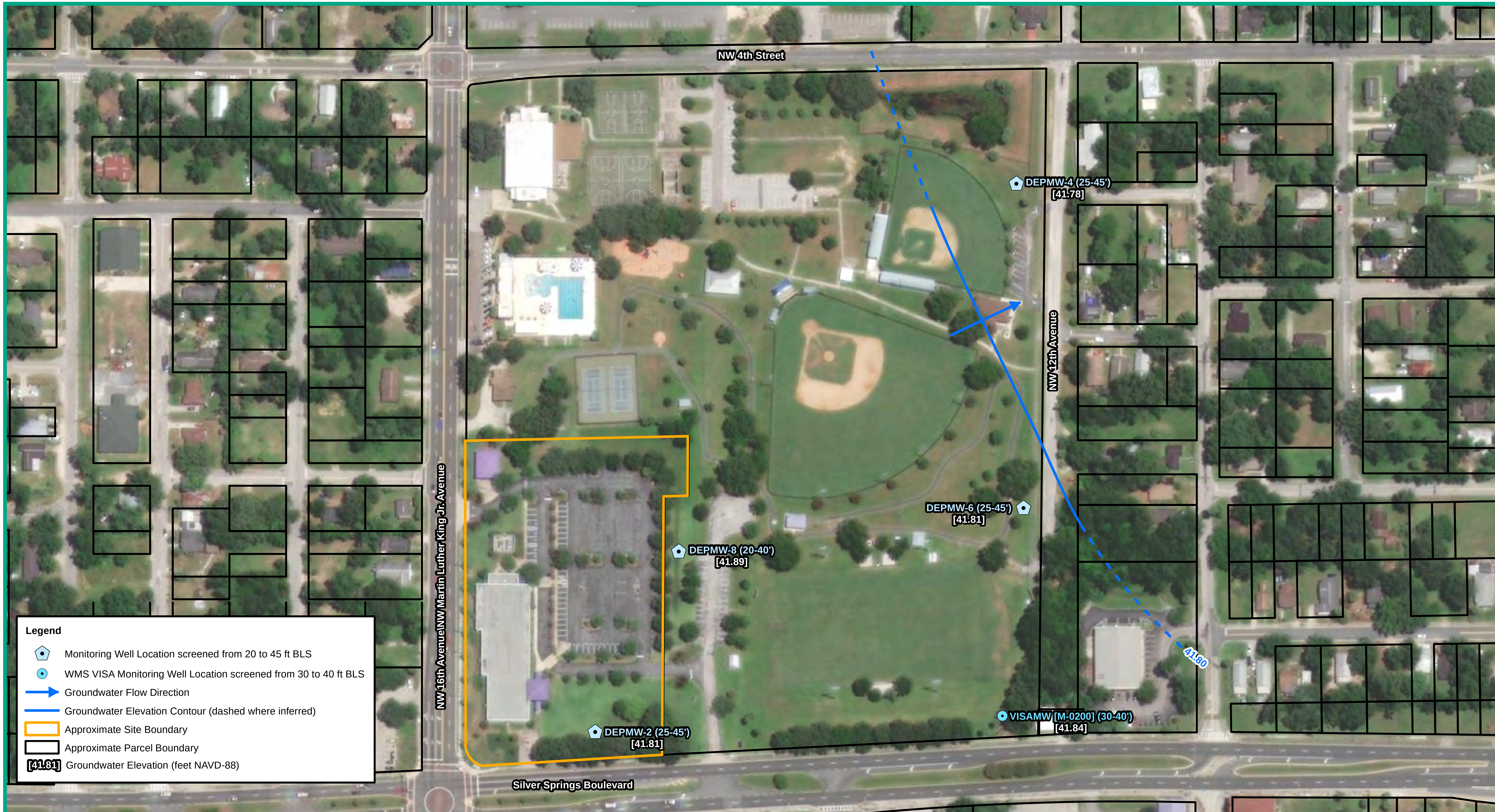


Figure 9
Groundwater Elevation Contour Map from 20 to 45 ft BLS - 14 June 2021
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. NAVD88 indicates North American Vertical Datum of 1988
2. ft BLS indicates feet below land surface.
3. Site and parcel boundaries obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
4. 2019 World Imagery Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 23, 2021

N

160 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Path: (Titusville-01\DATA) T:\0GIS\FR7522_FormerFSFC\MXDs\202107\GW_elev_20to45ftBLS_202106.mxd 23 July 2021. Last Edited by: mhensley

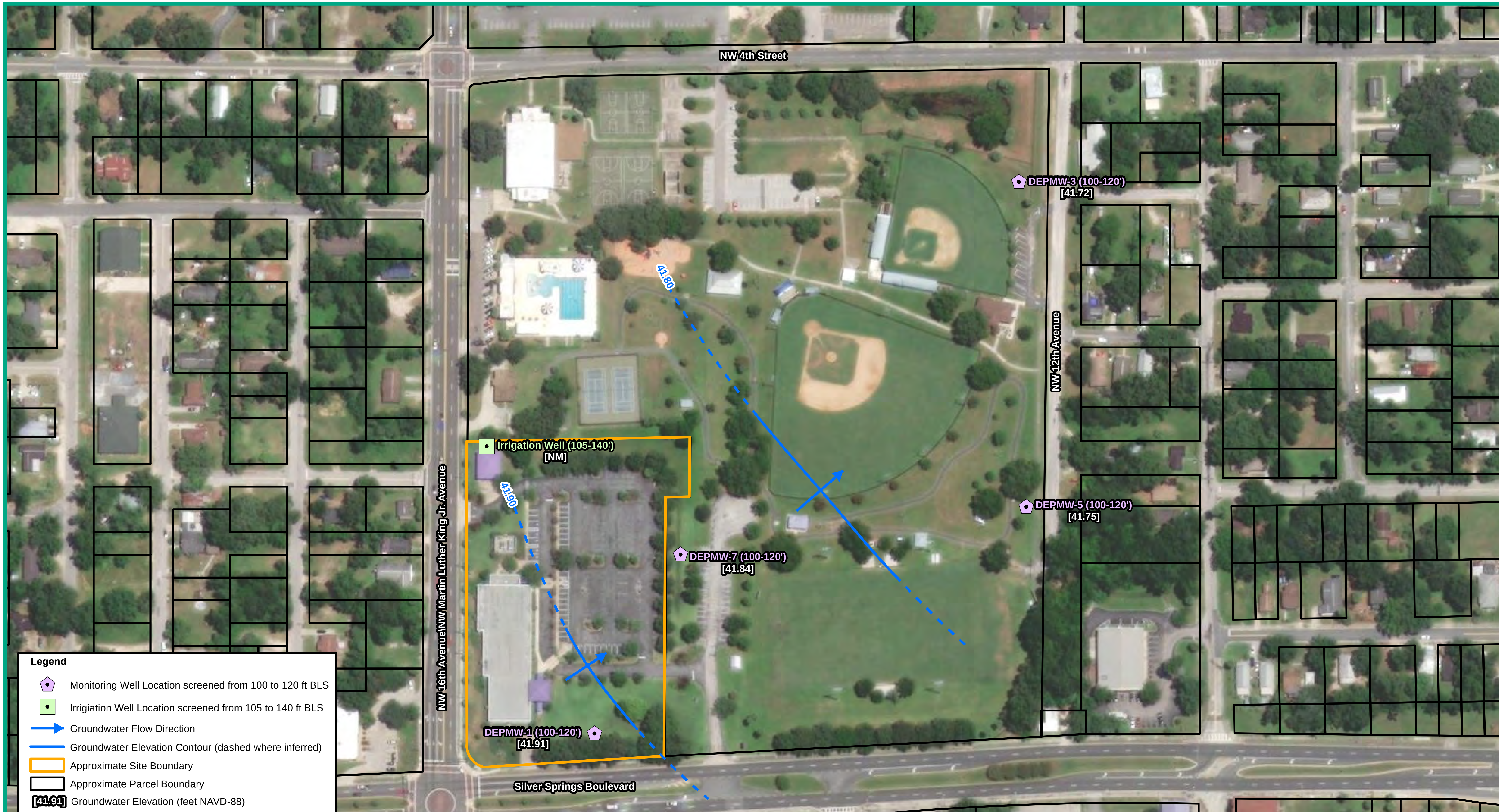


Figure 10
Groundwater Elevation Contour Map from 100 to 120 ft BLS - 14 June 2021
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. NAVD88 indicates North American Vertical Datum of 1988
2. ft BLS indicates feet below land surface.
3. NM indicates not measured.
4. Site and parcel boundaries obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
5. 2019 World Imagery Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 23, 2021

N

160 Feet

Path: (Titusville-01\DATA) T:\0GIS\FR7522_FormerFSFC\MXDs\202107\GW_elev_100to120ftBLS_202106.mxd 23 July 2021. Last Edited by: mhensley

SB-68

Date	Depth	PFOS	PFOA
3/23/2021	0-0.5	0.32 I	0.20 U
	0.5-2	0.20 U	0.20 U
	2-4	0.21 U	0.21 U
	4-6	0.22 U	0.22 U
	6-8	0.24 U	0.24 U
	10-12	0.30 U	0.30 U
	13-15	0.26 U	0.26 U
	23-25	0.27 U	0.27 U
	32-34	0.26 U	0.26 U

SB-18

Date	Depth	PFOS	PFOA
10/12/2020	0-0.5	6.4	0.73
	0.5-2	3.1	0.19 I
	2-4	**8.1**	0.25 I

SB-2

Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	**23**	**3.3**
	2-4	**42**	**2.8**
	4-6	**120**	1.9
	6-8	**180**	**2.8**
	10-12	**150**	1.3
	13-15	**70**	0.099 U
	23-25	**21**	**5.5**
	28-30	**18**	0.21 I

SB-66

Date	Depth	PFOS	PFOA
3/23/2021	0-0.5	0.19 U	0.19 U
	0.5-2	0.20 U	0.20 U
	2-4	0.20 U	0.20 U
	4-6	0.21 U	0.21 U

SB-67

Date	Depth	PFOS	PFOA
3/23/2021	0-0.5	0.68 I	0.21 U
	0.5-2	0.54 I	0.19 U
	2-4	0.19 U	0.19 U
	4-6	0.25 U	0.25 U

SB-3

Date	Depth	PFOS	PFOA
10/13/2020	0.5-2	**47**	**17**
	2-4	4.4	0.90
	4-6	**36**	**3.3**
	6-8	**8.9**	0.81
	10-12	**110**	**4.4**
	13-15	**69**	**3.1**
	23-25	**22**	1.5
	28-30	**68**	1.5

SB-19

Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	**31**	0.68
	0.5-2	**16**	0.96
	2-4	**8.1**	0.21 I

SB-16

Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	3.3	0.37 I
	0.5-2	2.7	0.28 I
	2-4	1.2	0.095 U

SB-69

Date	Depth	PFOS	PFOA
3/24/2021	0-0.5	1.4	0.20 U
	0.5-2	4.5	0.21 U
	2-4	0.41 I	0.23 U
	4-6	0.22 U	0.22 U

SB-8

Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	2.8	0.20 I
	0.5-2	1.7	0.098 U
3/23/2021	2-4	0.20 U	0.20 U
	4-6	0.20 I	0.19 U

SB-9

Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	1.3	0.16 I
	0.5-2	**11**	0.49
3/23/2021	2-4	3.1	0.20 U
	4-6	1.1	0.21 U

SB-10

Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	1.5	0.12 I
	0.5-2	0.20 U	0.10 U
3/23/2021	2-4	0.46 I	0.22 U
	4-6	0.22 I	0.22 U

SB-13

Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	**24**	2.0
	0.5-2	**24**	**2.5**
	2-4	7.4	2.4

SB-11

Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	1.6	0.13 I
	0.5-2	1.1	0.098 U

SB-70

Date	Depth	PFOS	PFOA
3/24/2021	0-0.5	**15**	0.21 U
	0.5-2	0.89	0.22 U
	2-4	0.99	0.23 U
	4-6	0.97 I	0.25 U

SB-21

Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	1.3	0.16 I
	0.5-2	2.8	0.099 U
	2-4	0.81 I	0.10 U

SB-17

Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	**11**	0.51
	0.5-2	**10**	0.70
	2-4	1.6	0.097 U

SB-15

Date	Depth	PFOS	PFOA
10/13/2020	0.5-2	**73**	**4.2**
	2-4	**56**	1.3

SB-63

Date	Depth	PFOS	PFOA
3/23/2021	0-0.5	6.5	0.58 I
	0.5-2	2.0	0.20 I
	2-4	0.67 I	0.20 U
	4-6	0.22 I	0.20 U
	6-8	0.19 U	0.19 U
	10-12	0.29 I	0.21 U
	13-15	0.22 U	0.22 U
	23-25	0.23 U	0.23 U
	33-35	0.29 U	0.29 U

SB-20

Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	2.6	0.10 U
	0.5-2	3.4	0.15 I
	2-4	5.3	0.098 U

SB-12

Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	2.8	0.18 I
	0.5-2	1.5	0.10 U

SB-71

Date	Depth	PFOS	PFOA
3/24/2021	0-0.5	0.67 I	0.19 U
	0.5-2	0.21 U	0.21 U
	2-4	0.19 U	0.19 U
	4-6	0.22 U	0.22 U

SB-22

Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	3.4	0.31 I
	0.5-2	2.8	0.10 U
	2-4	0.64 I	0.10 U

SB-24

Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	2.5	0.67
	0.5-2	6.4	0.10 U
	2-4	**16**	0.10 U

SB-27

Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	**15**	0.87
	0.5-2	5.8	0.27 I
	2-3	**14**	0.23 I
3/24/2021	4-6	0.71 I	0.28 U

SB-64

Date	Depth	PFOS	PFOA
3/23/2021	0-0.5	5.2	0.46 I
	0.5-2	2.2	0.20 U
	2-4	3.4	0.20 U
	4-6	0.38 I	0.20 U

SB-23

Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	4.5	0.38 I
	0.5-2	**8.6**	0.11 U
	2-4	**7.6**	0.10 U

SB-34

Date	Depth	PFOS	PFOA
10/13/2020	0.5-2	**24**	0.98
	2-4	6.8	0.10 U

SB-25

Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	1.2	0.13 I
	0.5-2	0.90	0.10 U

SB-37

Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	**12**	0.39 I
	0.5-2	3.9	0.19 I
	2-4	**17**	0.41
	4-6	1.9	0.10 U

SB-31

Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	2.5	0.22 I
	0.5-2	1.8	0.12 I
	2-4	0.81 I	0.10 U

SB-29

Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	**25**	**27**
	2-4	**15**	**12**

SB-14

Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	7.3	**8.2**
	2-4	7.2	0.16 I

SB-32

Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	**13**	0.30 I
	0.5-2	2.7	0.19 I
	2-4	4.1	0.11 I

SB-4

Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	7.4	2.4
	2-4	2.9	0.33 I
	4-6	0.83 I	0.10 U
	6-8	0.66 I	0.094 U
	10-12	0.52 I	0.13 U
	13-15	0.62 I	0.14 U
	23-25	0.30 U	0.15 U
	30-32	0.44 I	0.13 U

SB-26

Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	2.4	0.23 I
	0.5-2	0.53 I	0.10 U

SB-30

Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	**19**	**4.7**
	2-4	**65**	2.4

SB-28

Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	6.2	**3.3**
	2-4	2.5	0.59

SB-62

Date	Depth	PFOS	PFOA
3/22/2021	0-0.5	2.5	0.22 I
	0.5-2	2.6	0.25 I
	2-4	0.21 U	0.21 U
	4-6	0.21 U	0.21 U

SB-33

Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	3.7	0.25 I
	0.5-2	6.5	0.21 I
	2-4	**9.8**	0.13 I

SB-35

Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	3.4	**2.6**
	2-3	7.0	**5.0**

SB-72

Date	Depth	PFOS	PFOA
3/24/2021	0-0.5	0.38 I	0.21 U
	0.5-2	0.21 U	0.21 U
	2-4	0.19 U	0.19 U
	4-6	0.21 U	0.21 U
	6-8	0.21 U	0.21 U
	10-12	0.20 U	0.20 U
	13-15	0.22 U	0.22 U
	23-25	0.27 U	0.27 U
	33-35	1.2 I	0.34 U

SB-36

Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	4.8	**2.7**
	2-4	1.1	0.10 U

SB-1

Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	3.8	0.23 I
	0.5-2	**8.3**	0.20 I
	2-4	**22**	0.12 I
	4-6	**8.0**	0.31 I
	6-8	1.9	0.13 I
	10-12	1.9	0.11 I
	13-15	0.64 I	0.10 U
	23-25	**11**	0.15 I
	33-35	3.1	0.16 U

SB-65

Date	Depth	PFOS	PFOA
3/24/2021	0-0.5	4.4	0.20 U
	0.5-2	7.2	0.21 U

SB-38

Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	4.5	0.54
	0.5-2	1.4	0.096 U

SB-60

Date	Depth	PFOS	PFOA
3/22/2021	0-0.5	2.5	0.20 U
	0.5-2	2.9	0.23 U
	2-4	3.4	0.21 U
	4-6	1.5	0.21 U

SB-46

Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	1.3	0.65
	2-4	0.33 I	0.23 I

SB-47

Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	1.1	0.49
	2-4	0.22 U	0.15 I

SB-50

Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	3.4	0.22 I
	2-4	4.2	0.40 I

SB-5

Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	**14**	0.49 I
	0.5-2	**28**	1.0
	2-4	5.8	0.14 U
	4-6	2.2	0.17 I
	6-8	6.0	0.13 U
	10-12	4.1	0.11 U
	13-15	1.2	0.11 U
	23-25	**8.0**	0.12 U
	28-30	**250**	0.12 U

SB-61

Date	Depth	PFOS	PFOA
3/22/2021	0-0.5	4.7	0.40 I
	0.5-2	5.1	0.26 I
	2-4	0.66 I	0.21 U
	4-6	0.28 I	0.20 U
	6-8	0.30 I	0.23 U
	10-12	0.27 U	0.27 U
	13-15	0.31 U	0.31 U
	23-25	0.28 U	0.28 U
	28-30	0.25 U	0.25 U

SB-49

Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	4.1	0.41
	0.5-2	1.3	0.13 I

SB-52

Date	Depth	PFOS	PFOA
10/13/2020	0.5-2	1.0	0.15 I
	2-4	0.21 U	0.14 I

SB-51

Date	Depth	PFOS	PFOA
10/12/2020	0.5-2	1.3	0.22 I
	2-4	0.29 U	0.15 U

SB-54

Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	4.2	0.52
	0.5-2	0.69 I	0.15 I
	2-4	0.51 I	0.15 I

SB-53

Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	4.1	0.52
	0.5-2	0.42 I	0.11 U

SB-42

Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	**12**	0.32 I
	0.5-2	6.4	0.13 I
	2-4	**9.5**	0.25 I
	4-6	**7.5 J**	0.26 U

SB-7

Date	Depth	PFOS	PFOA
10/13/2020	0.5-2	6.3	0.10 U
	2-4	4.9	0.17 I
	4-6	3.2	0.98
10/14/2020	6-8	1.4	0.41 I
	10-12	0.34 I	0.31 I
	13-15	0.27 U	0.13 U
	23-25	0.61 I	0.12 U
	28-30	2.3	0.12 U

SB-73

Date	Depth	PFOS	PFOA
3/24/2021	0-0.5	0.73 I	0.20 U
	0.5-2	0.21 U	0.21 U
	2-4	0.21 U	0.21 U
	4-6	0.20 U	0.20 U

SB-55

Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	2.0	0.32 I
	0.5-2	1.4	0.11 U
	2-4	7.1	0.18 I

SB-6

Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	2.9	0.17 I
	0.5-2	1.0	0.10 U
	2-4	0.60 I	0.10 U
	4-6	0.97	0.11 U
	6-8	0.46 I	0.11 U
	10-12	0.25 I	0.12 U
	13-15	0.23 U	0.12 U
	23-25	0.28 U	0.14 U
	28-30	0.59 I	0.15 U

SB-43

Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	4.8	0.45 I
	0.5-2	2.5	0.16 I
	2-4	2.0 J	0.14 UJ
	4-6	3.9	0.11 U

SB-39

Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	3.3	0.36 I
	0.5-2	2.7	0.10 U
	2-4	3.8	0.11 U

SB-56

Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	1.2 I	0.16 U
	0.5-2	2.0	0.16 I
	2-4	0.78 I	0.19 I

SB-44

Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	1.7	0.15 I
	0.5-2	7.0	0.33 I
	2-4	2.4	0.14 I
	4-6	0.71 I	0.098 U

SB-58

Date	Depth	PFOS	PFOA
3/22/2021	0-0.5	3.9	0.20 I
	0.5-2	**58**	0.33 I
	2-4	**13**	0.85 I
	4-6	3.2	0.53 I

SB-57

Date	Depth	PFOS	PFOA
3/22/2021	0-0.5	2.9	0.20 U
	0.5-2	2.7	0.20 U
	2-4	**8.9**	0.21 U
	4-6	1.5	0.20 U

SB-40

Date	Depth	PFOS	PFOA
10/13/2020	0.5-2	1.5	0.11 I
	2-4	2.1	0.12 I

SB-48

Date	Depth	PFOS	PFOA
10/15/2020	0-0.5	3.3	0.99
	0.5-2	**13**	1.3
	2-3	**10**	0.61
3/23/2021	4-6	0.69 I	0.22 U

SB-45*

Date	Depth	PFOS	PFOA
10/14/2020	0-0.5	3.3	0.25 I
	0.5-2	7.2	0.15 I
	2-4	**16**	0.15 I

SB-41

Date	Depth	PFOS	PFOA
10/13/2020	0-0.5	7.0	0.89
	0.5-2	**8.4**	0.26 I
	2-4	1.6	0.10 U

SB-74

Date	Depth	PFOS	PFOA
3/24/2021	0-0.5	0.41 I	0.21 U
	0.5-2	0.20 U	0.20 U
	2-4	0.21 U	0.21 U
	4-6	0.23 U	0.23 U

SB-45**

Date	Depth	PFOS	PFOA
3/24/2021	4-6	0.92	0.21 U
	6-8	0.69 I	0.21 U
	10-12	0.91 I	0.23 U
	13-15	0.55 I	0.23 U
	23-25	0.29 U	0.29 U
	28-30	0.61 I	0.26 U

SB-59

Date	Depth	PFOS	PFOA
3/22/2021	0-0.5	3.2	0.29 I
	0.5-2	2.6	0.19 U
	2-4	5.6	0.21 U
	4-6	0.80 I	0.20 U

Legend

- Soil Sample with All Results Less than Provisional Leachability SCTL
- Soil Sample with at Least One Result Greater than Provisional Leachability SCTL
- Approximate Site Boundary

Screening Criteria

Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)	Perfluorooctanoic acid (PFOA)
Leachability SCTL	7	2
Residential SCTL	1,300	1,300
Industrial SCTL	25,000	25,000

Figure 11
Summary of Analytical Results in Soil
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:

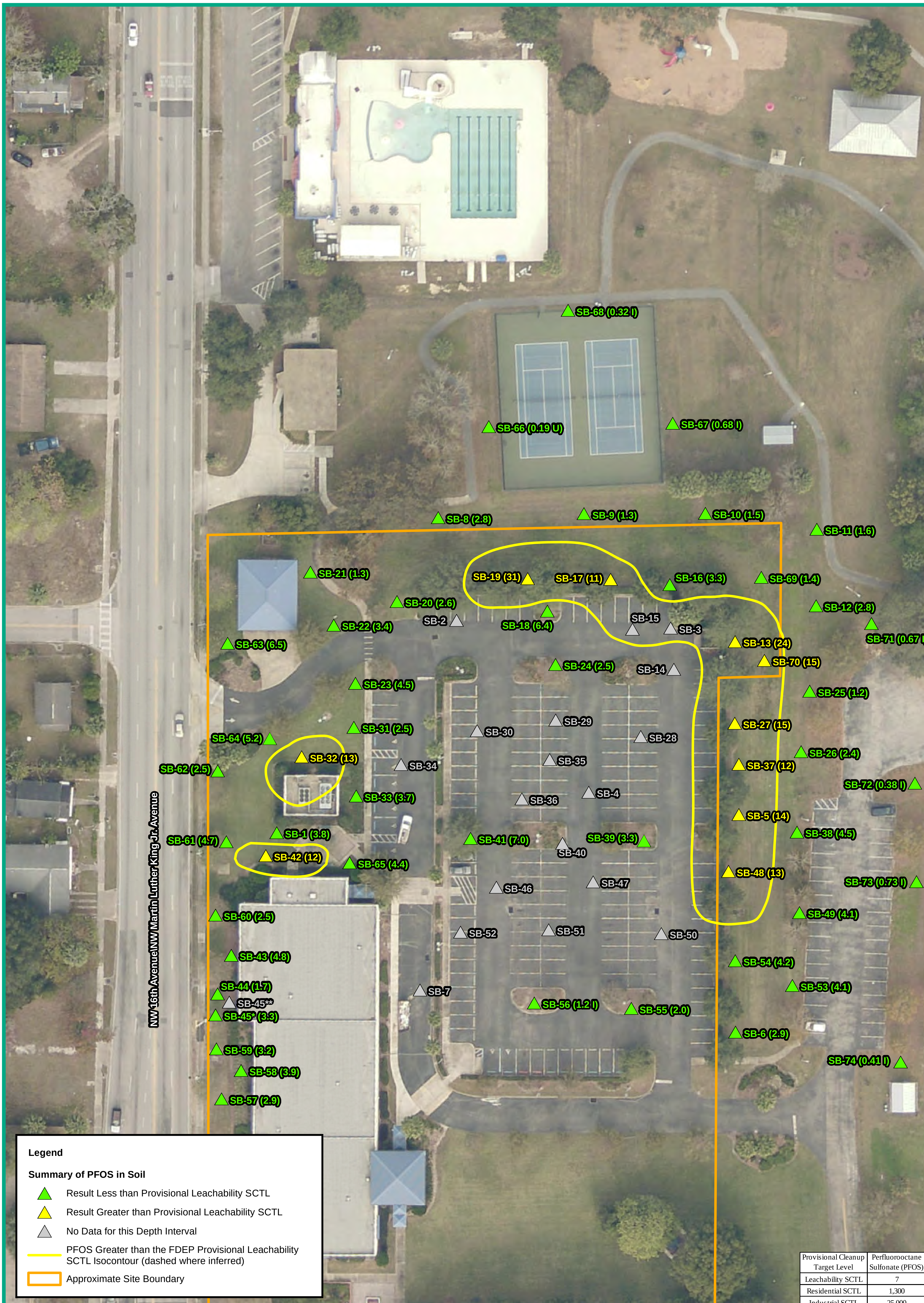
1. Results and screening critiera are presented in micorgrams per kilogram (µg/kg).
2. Sample depths are presented in feet below land surface.
3. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
4. J indicates estimated value and/or the analysis did not meet established quality control criteria.
5. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
6. * indicates SB-45 hand auger samples collected from 0 to 4 ft BLS.
7. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
8. Grey shaded, bold text indicates an exceedance of the FDEP provisional leachability soil cleanup target level (SCTL).
9. 2019 World Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)	Perfluorooctanoic acid (PFOA)
Leachability SCTL	7	2
Residential SCTL	1,300	1,300
Industrial SCTL	25,000	25,000

Date: July 23, 2021

N

60 Feet



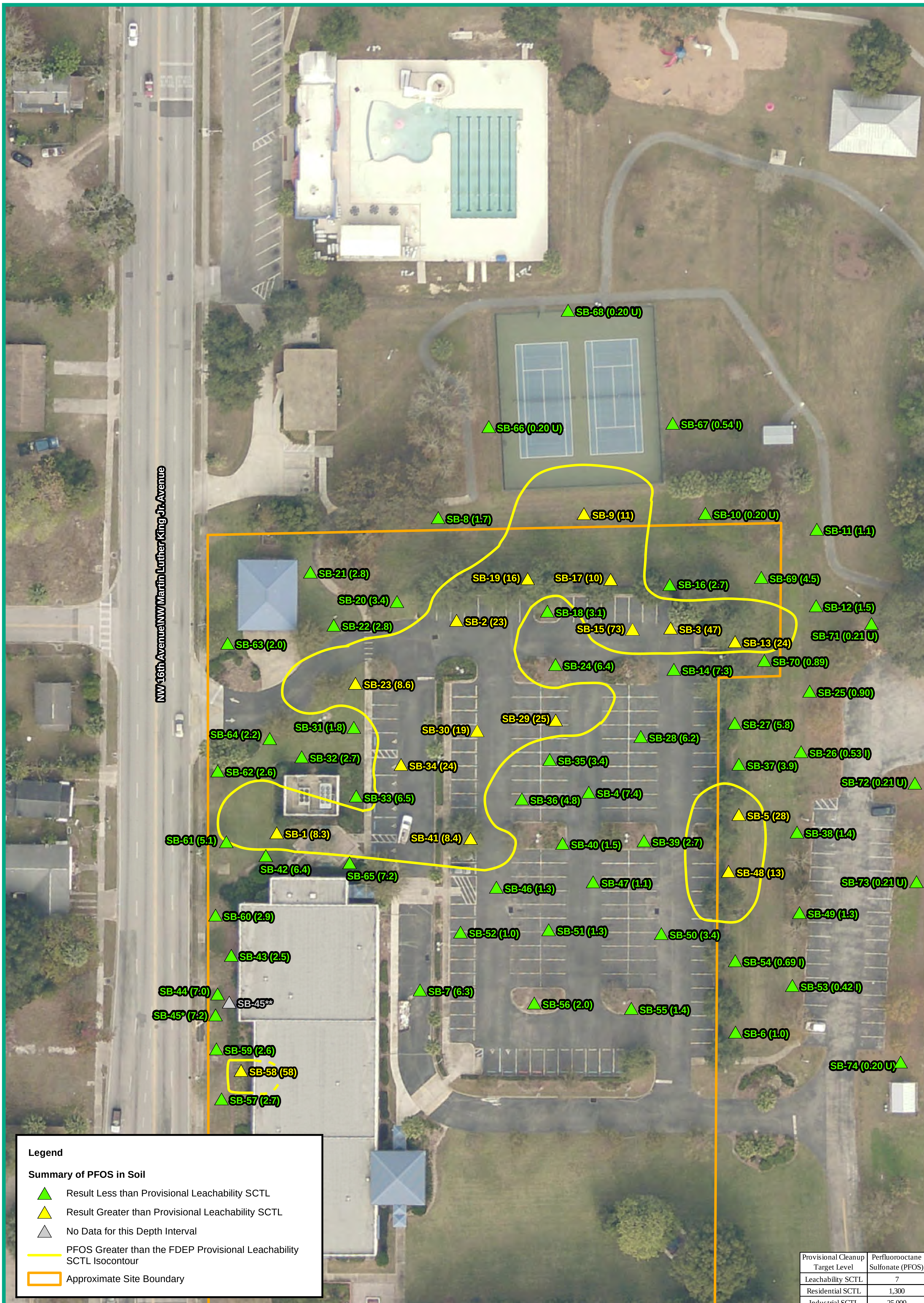
Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)
Leachability SCTL	7
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 12
Summary of PFOS in Soil from 0 to 0.5 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening critiera are presented in micorgrams per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
7. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
8. 2019 World Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 23, 2021

Path: (Titusville-01\DATA) T:\0GIS\FR7522_FormerFSFC\MXDs\202107\Soil_PFOS_0_0.5ftBLS_202107.mxd 23 July 2021 MAH



Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)
Leachability SCTL	7
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 13
Summary of PFOS in Soil from 0.5 to 2 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening critiera are presented in micorgrams per kilogram (μg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
7. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
8. 2019 World Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 23, 2021

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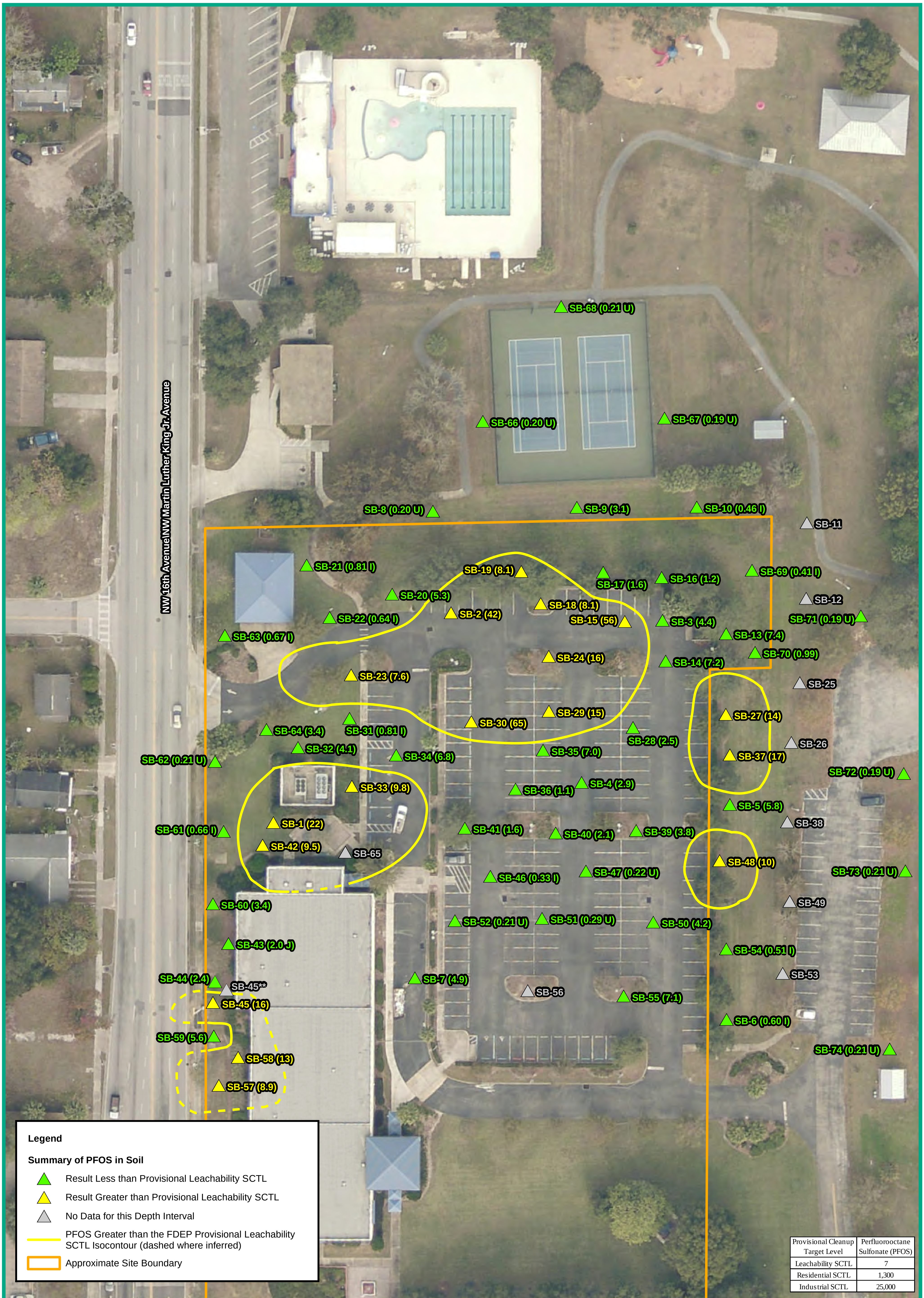


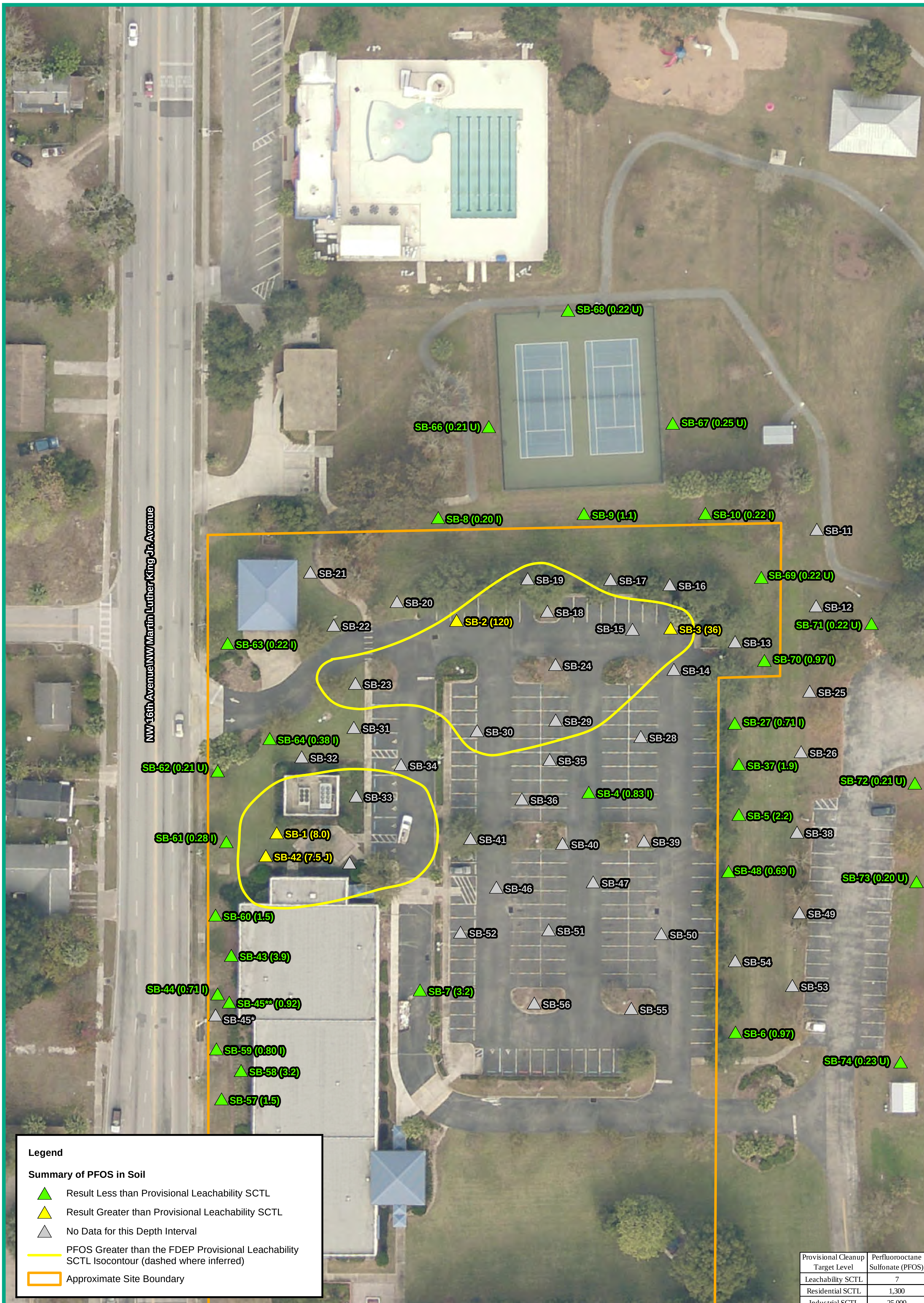
Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)
Leachability SCTL	7
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 14
Summary of PFOS in Soil from 2 to 4 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening critiera are presented in micorgrams per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. J indicates estimated value and/or the analysis did not meet established quality control criteria.
4. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
5. SCTL indicates soil cleanup target level.
6. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
7. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
8. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
9. 2019 World Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 23, 2021

Path: (Titusville-01\DATA) T:\0GIS\FR7522_FormerFSFC\MXDs\202107\Soil_PFOS_2_4ftBLS_202107.mxd 23 July 2021. Last Edited by: mhensley



Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)
Leachability SCTL	7
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 15
Summary of PFOS in Soil from 4 to 6 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening critiera are presented in micorgrams per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. J indicates estimated value and/or the analysis did not meet established quality control criteria.
4. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
5. SCTL indicates soil cleanup target level.
6. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
7. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
8. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
9. 2019 World Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

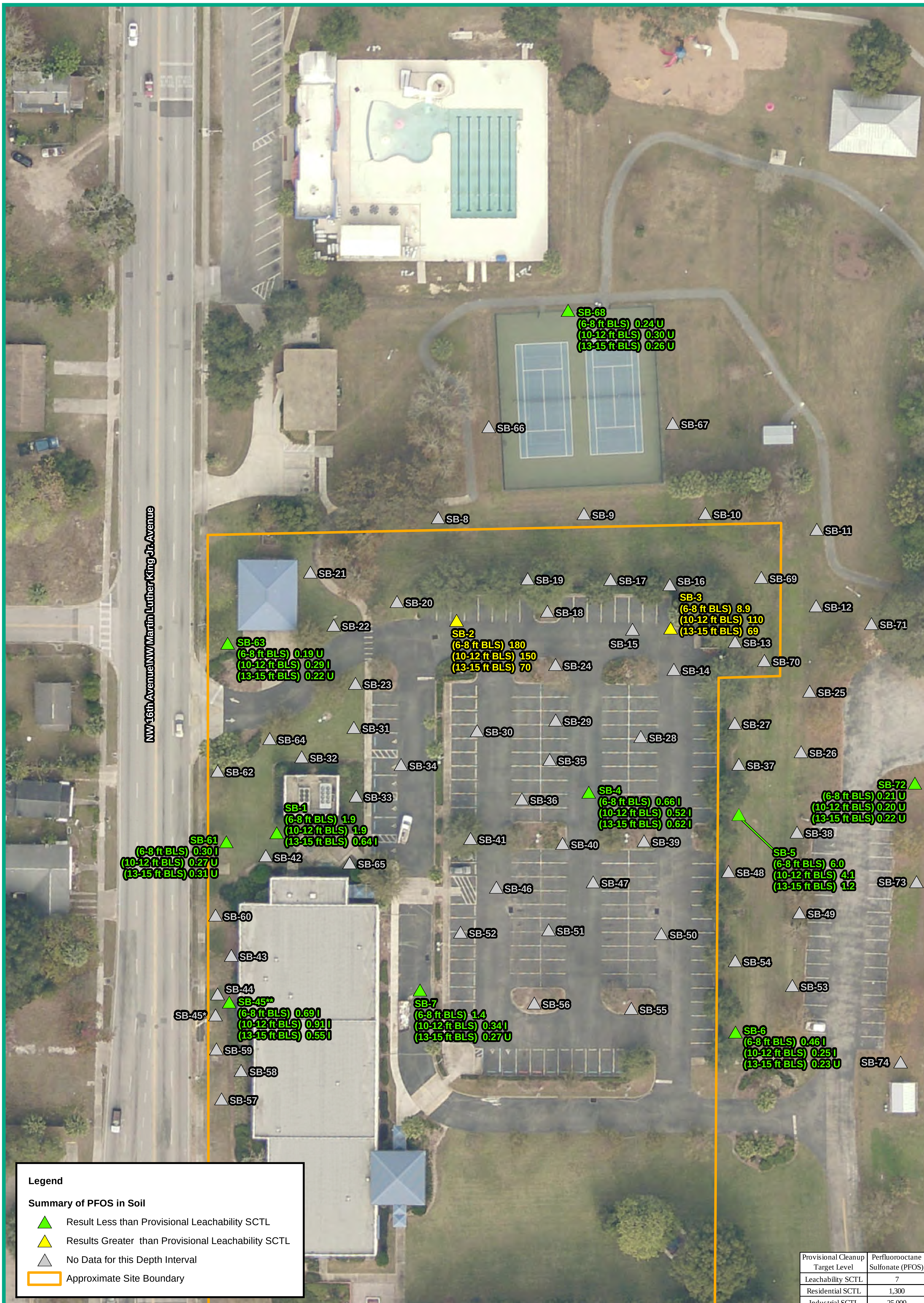
Date: July 23, 2021

N

60 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Path: (Titusville-01\DATA) T:\0GIS\FR7522_FormerFSFC\MXDs\202107\Soil_PFOS_4_6ftBLS_202107.mxd 23 July 2021. Last Edited by: mhensley



Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)
Leachability SCTL	7
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 16
Summary of PFOS in Soil from 6 to 15 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening critiera are presented in micorgrams per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
7. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
8. 2019 World Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

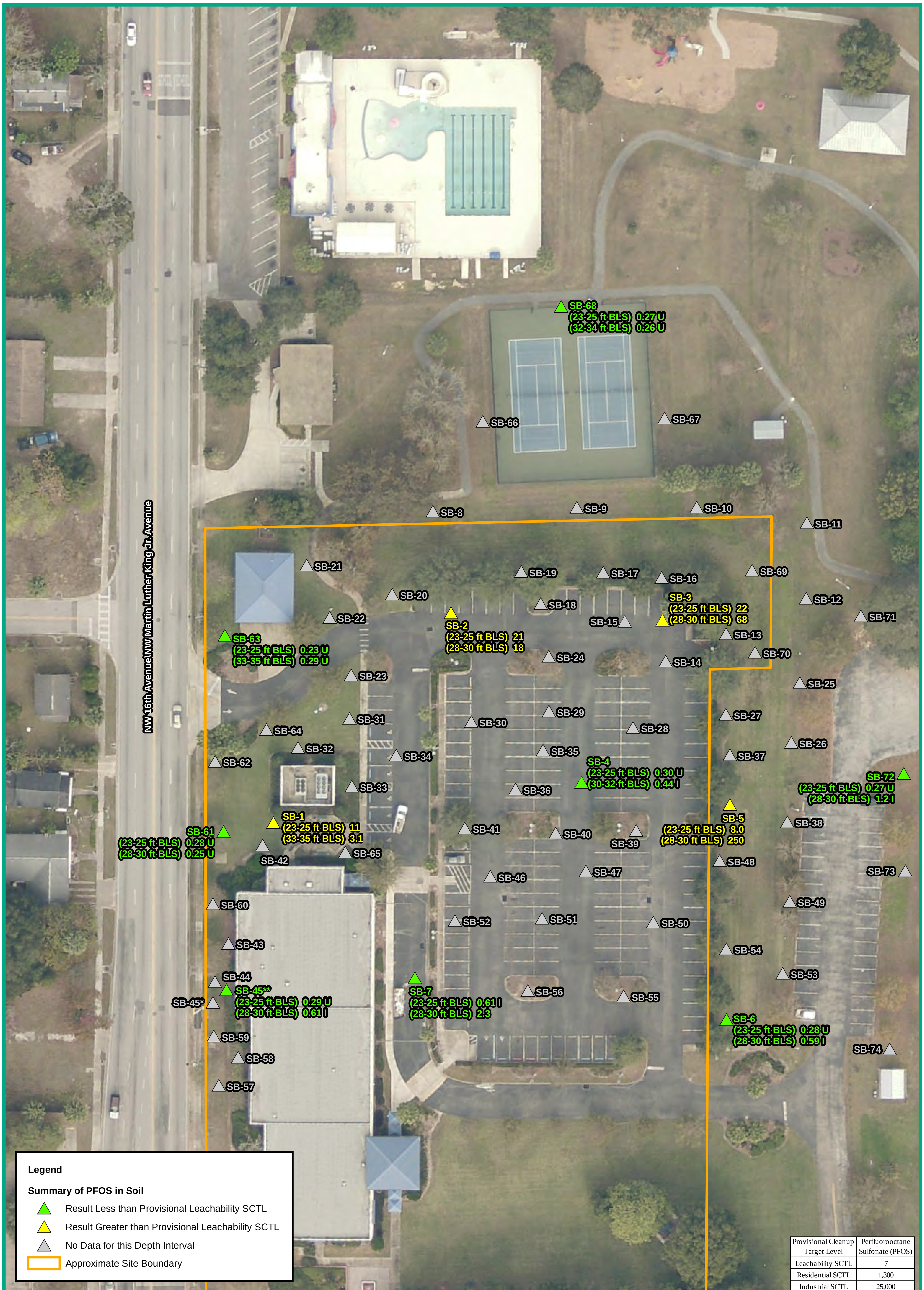
Date: July 23, 2021

N

60 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Path: (Titusville-01\DATA) T:\0GIS\FR7522_FormerFSFC\MXDs\202107\Soil_PFOS_6_15ftBLS_202107.mxd 23 July 2021. Last Edited by: mhensley



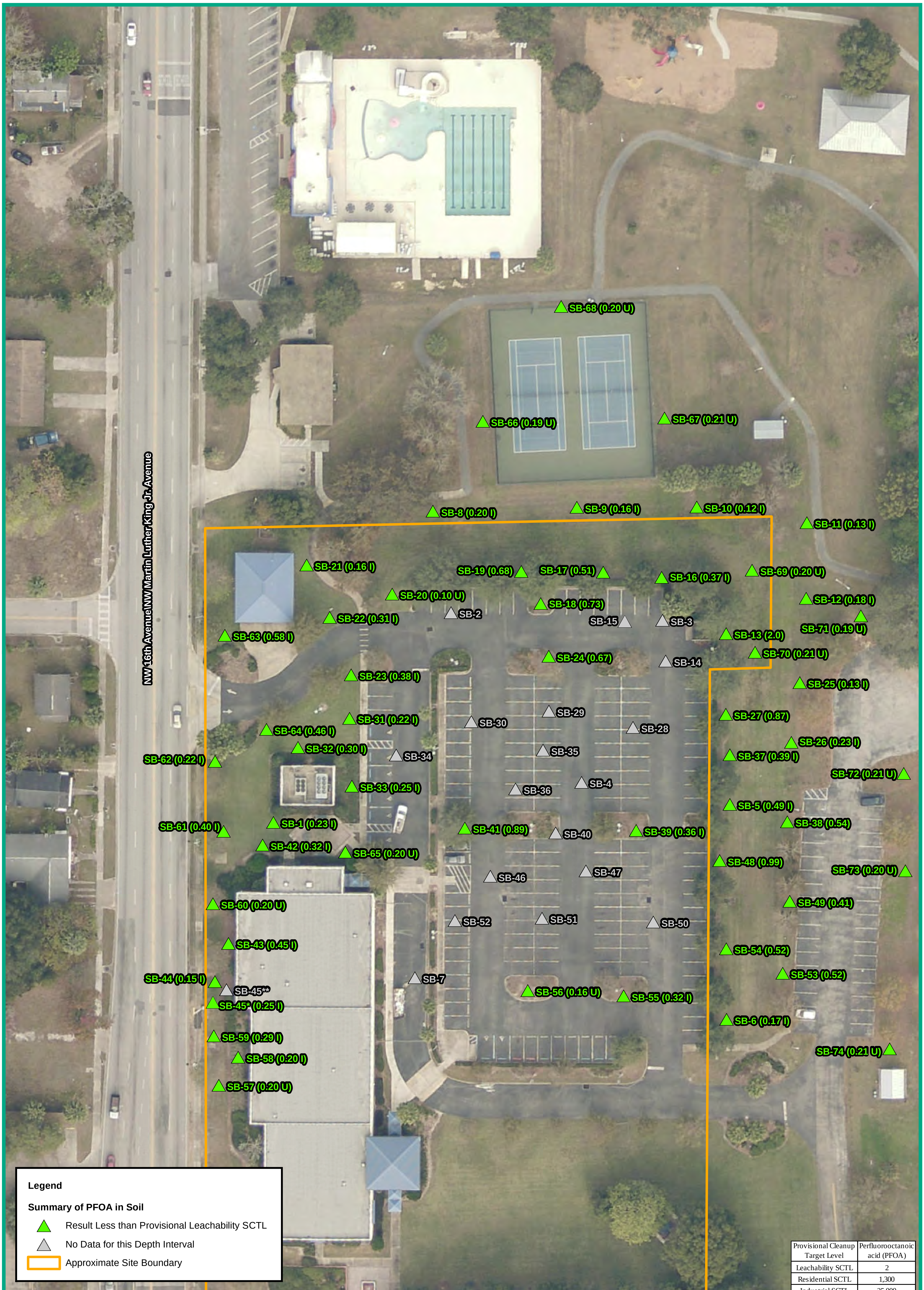
Provisional Cleanup Target Level	Perfluorooctane Sulfonate (PFOS)
Leachability SCTL	7
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 17
Summary of PFOS in Soil from 16 to 35 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening critiera are presented in micorgrams per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS
7. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
8. 2019 World Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 26, 2021

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



Provisional Cleanup Target Level	Perfluorooctanoic acid (PFOA)
Leachability SCTL	2
Residential SCTL	1,300
Industrial SCTL	25,000

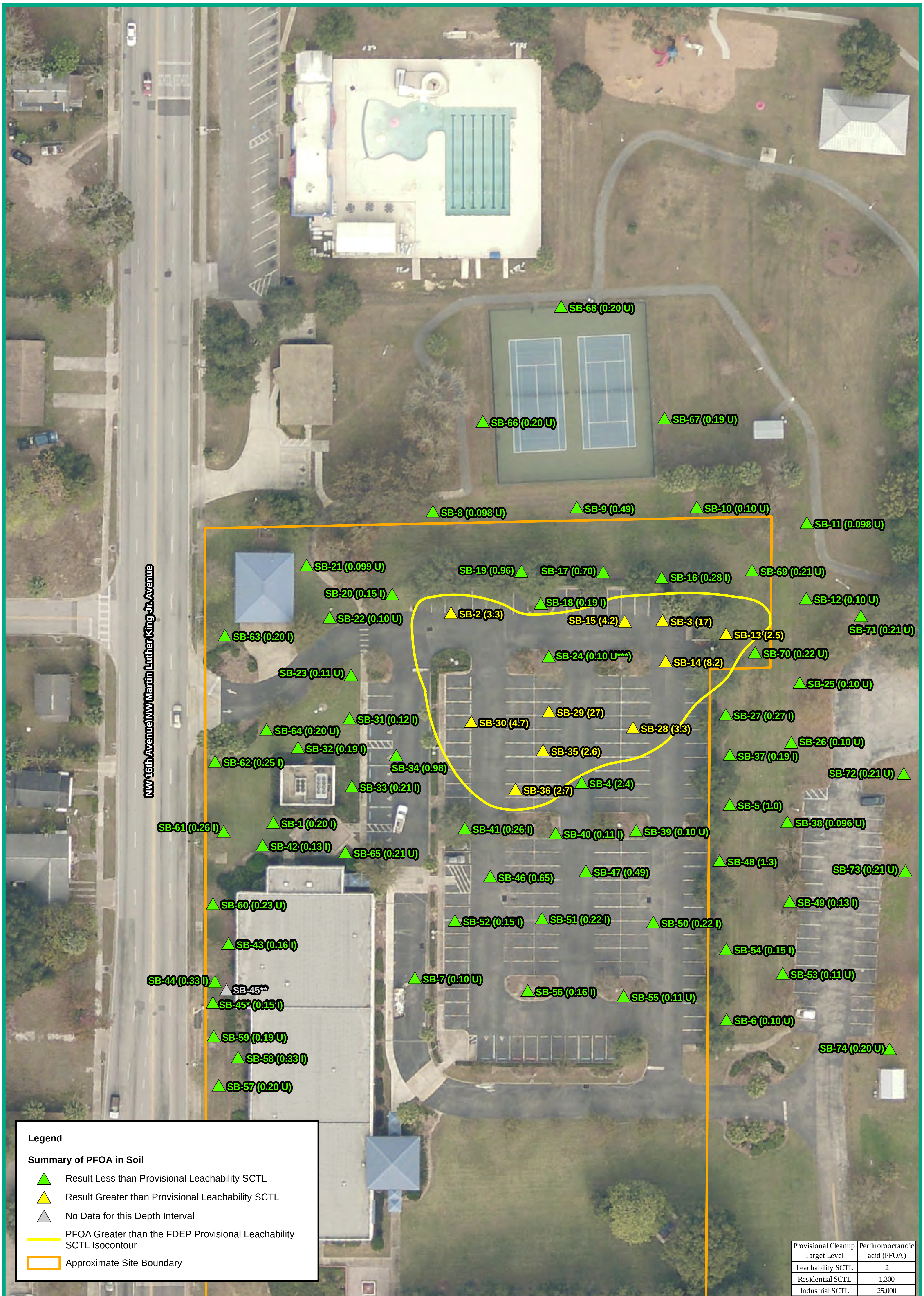
Figure 18
Summary of PFOA in Soil from 0 to 0.5 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening critiera are presented in micrograms per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
7. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
8. 2019 World Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 23, 2021

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Path: (Titusville-01\DATA) T:\0GIS\FR7522_FormerFSFC\MXDs\202107\Soil_PFOA_0_0.5ftBLS_20207.mxd 23 July 2021. Last Edited by: mhensley



Provisional Cleanup Target Level	Perfluorooctanoic acid (PFOA)
Leachability SCTL	2
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 19
Summary of PFOA in Soil from 0.5 to 2 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening critiera are presented in micorgrams per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
7. *** indicates not used to generate contour.
8. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
9. 2019 World Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 23, 2021

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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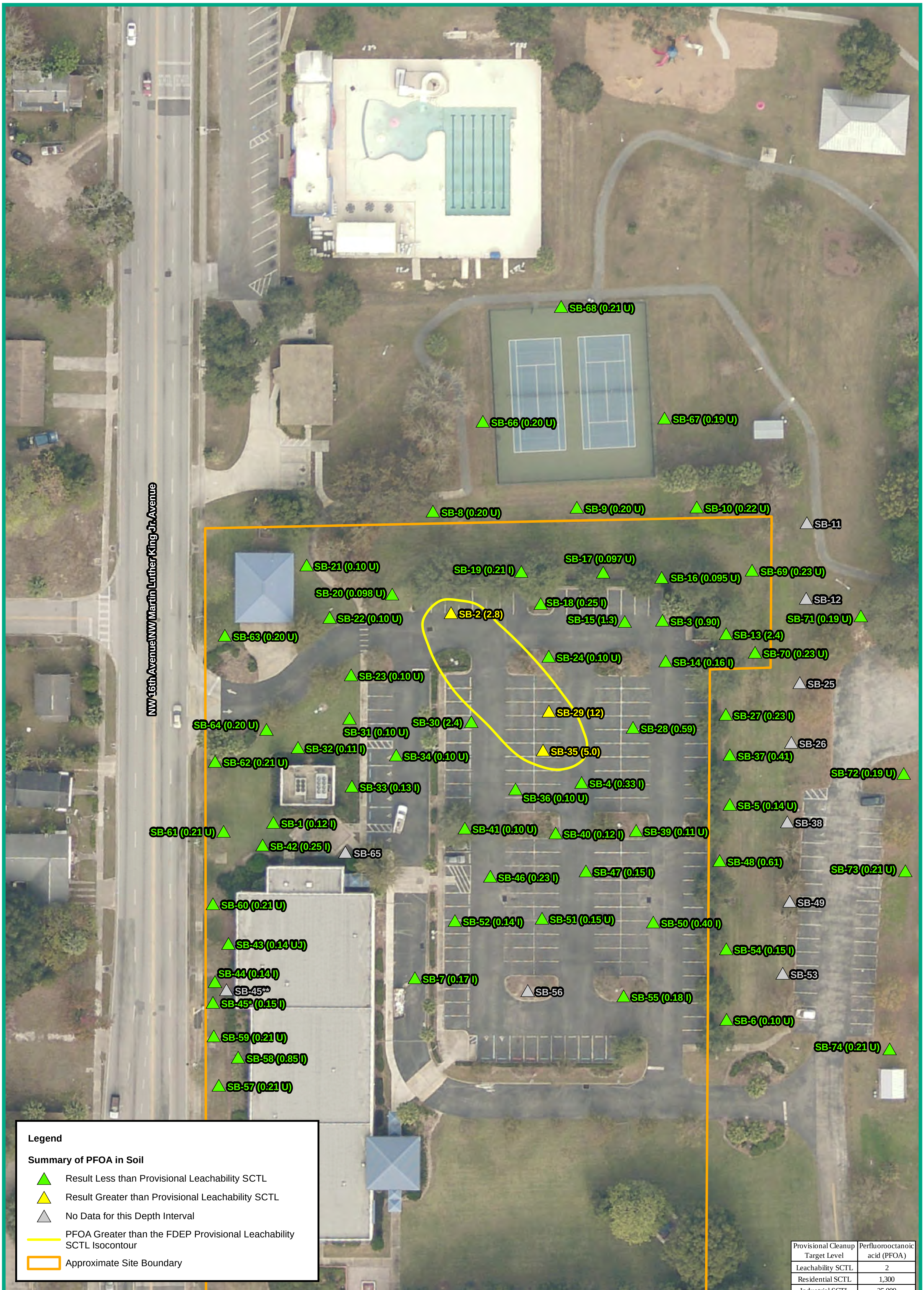


Provisional Cleanup Target Level	Perfluorooctanoic acid (PFOA)
Leachability SCTL	2
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 20
Summary of PFOA in Soil from 2 to 4 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

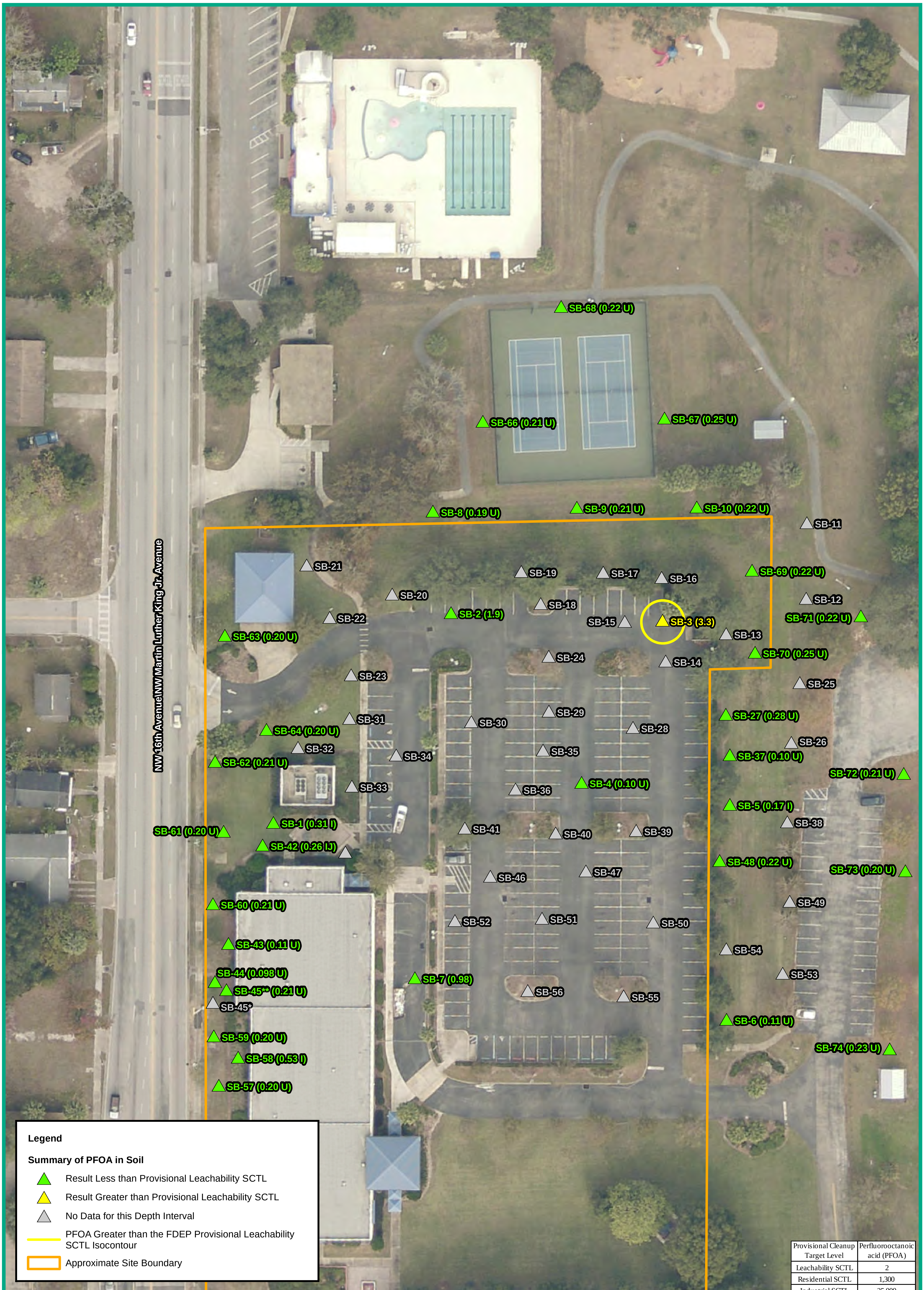
Notes:
1. Results and screening critiera are presented in micorgrams per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. J indicates estimated value and/or the analysis did not meet established quality control criteria.
4. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
5. SCTL indicates soil cleanup target level.
6. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
7. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
8. 2019 World Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 23, 2021

N
60
Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Path: (Titusville-01\DATA) T:\0GIS\FR7522_FormerFSFC\MXDs\202107\Soil_PFOA_2_4ftBLS_202107.mxd 23 July 2021 MAH



Provisional Cleanup Target Level	Perfluorooctanoic acid (PFOA)
Leachability SCTL	2
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 21
Summary of PFOA in Soil from 4 to 6 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

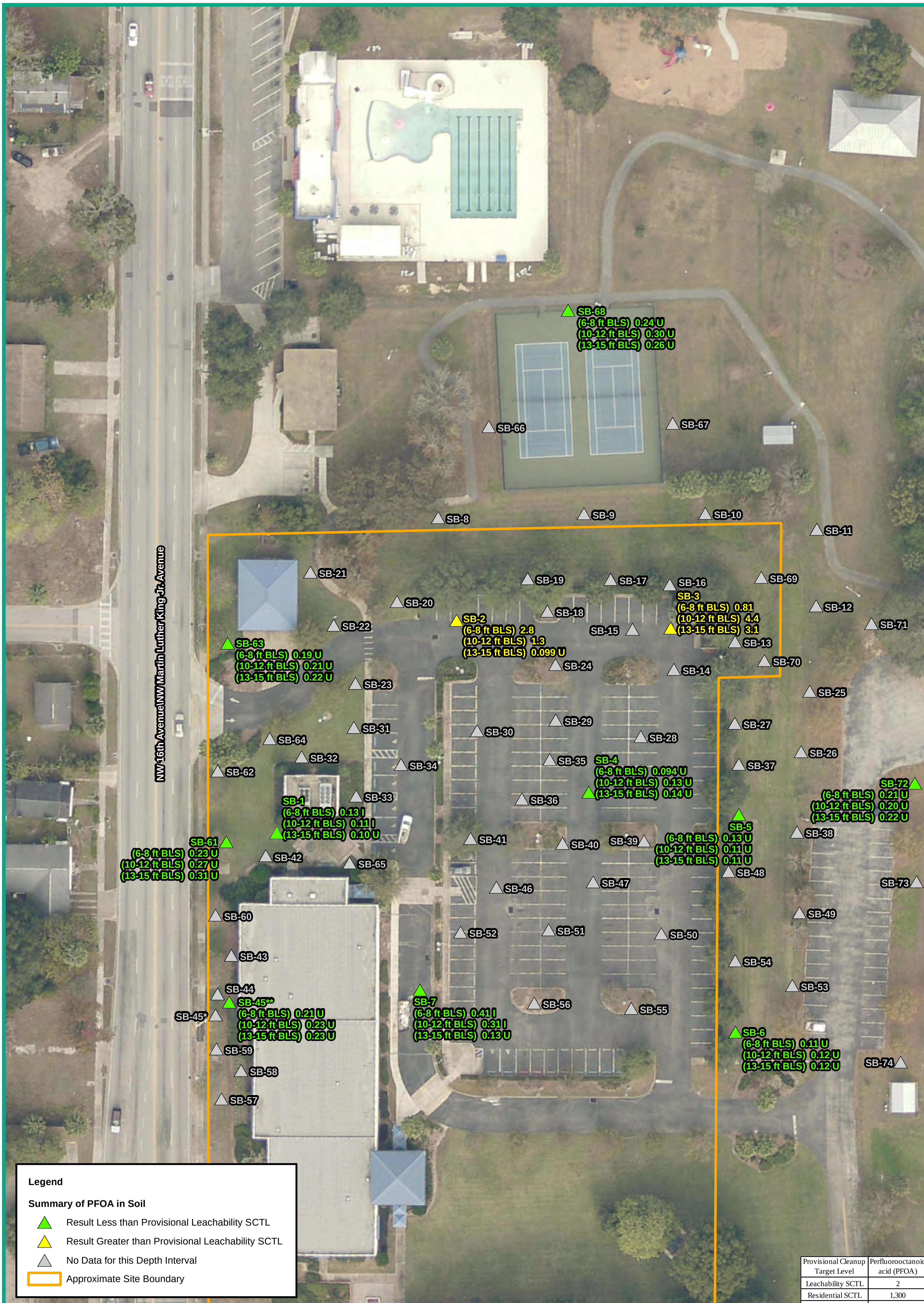
Notes:
1. Results and screening critiera are presented in micorgrams per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. J indicates estimated value and/or the analysis did not meet established quality control criteria.
4. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
5. SCTL indicates soil cleanup target level.
6. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
7. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
8. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
9. 2019 World Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 23, 2021

N

60 Feet

Path: (Titusville-01\DATA) T:\0GIS\FR7522_FormerFSFC\MXDs\202107\Soil_PFOA_4_6ftBLS_202107.mxd 23 July 2021 MAH



Provisional Cleanup Target Level	Perfluorooctanoic acid (PFOA)
Leachability SCTL	2
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 22
Summary of PFOA in Soil from 6 to 15 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening critiera are presented in micorgrams per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
7. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
8. 2019 World Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 23, 2021

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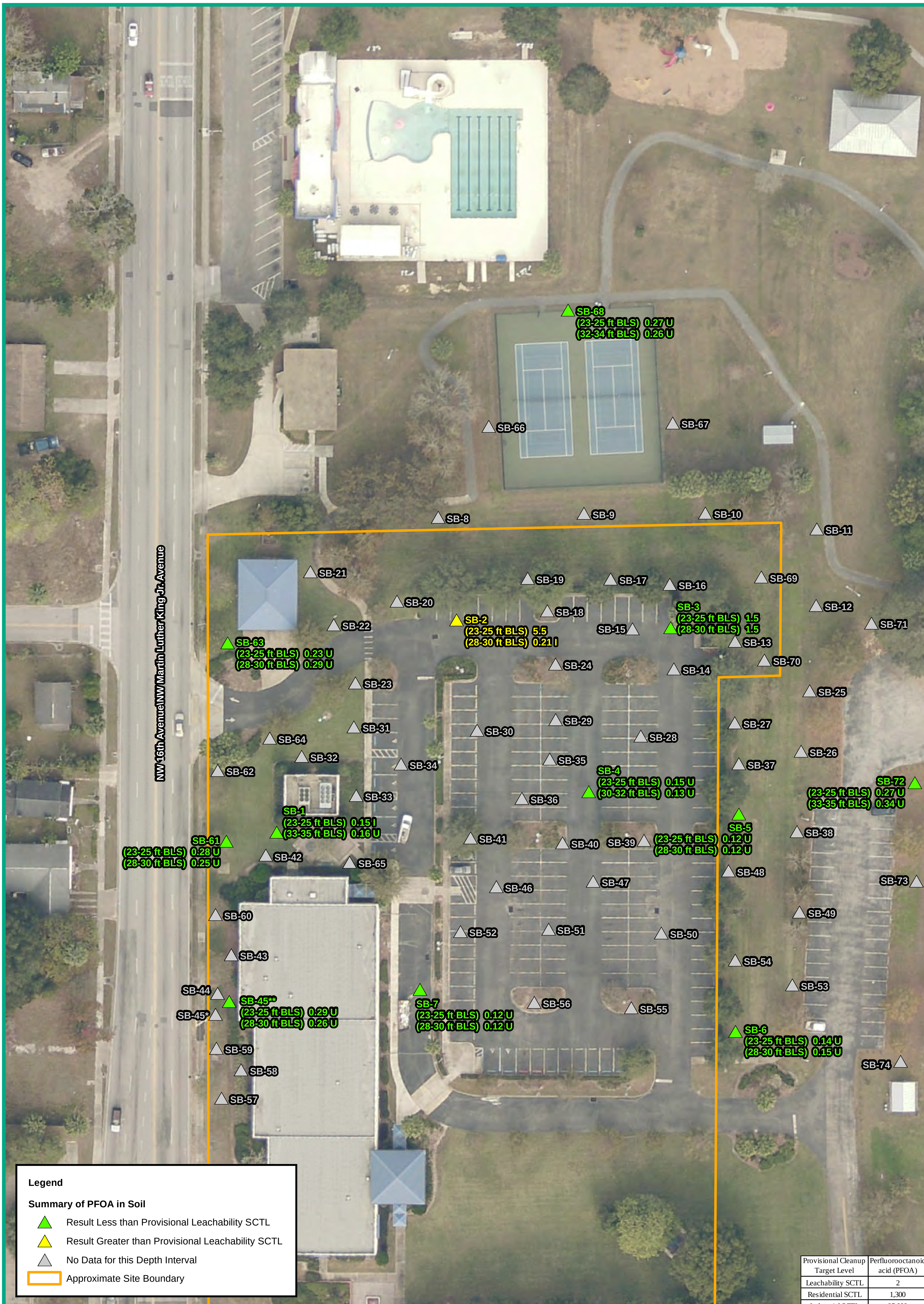

Provisional Cleanup Target Level	Perfluorooctanoic acid (PFOA)
Leachability SCTL	2
Residential SCTL	1,300
Industrial SCTL	25,000

Figure 23
Summary of PFOA in Soil from 16 to 35 ft BLS
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening critiera are presented in micorgrams per kilogram (µg/kg).
2. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
3. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
4. SCTL indicates soil cleanup target level.
5. * indicates SB-45 hand auger samples collected from 0 to 4 feet (ft) below land surface (BLS).
6. ** indicates SB-45 Direct Push Technology samples collected from depths greater than 4 ft BLS.
7. Site boundary obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
8. 2019 World Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 23, 2021

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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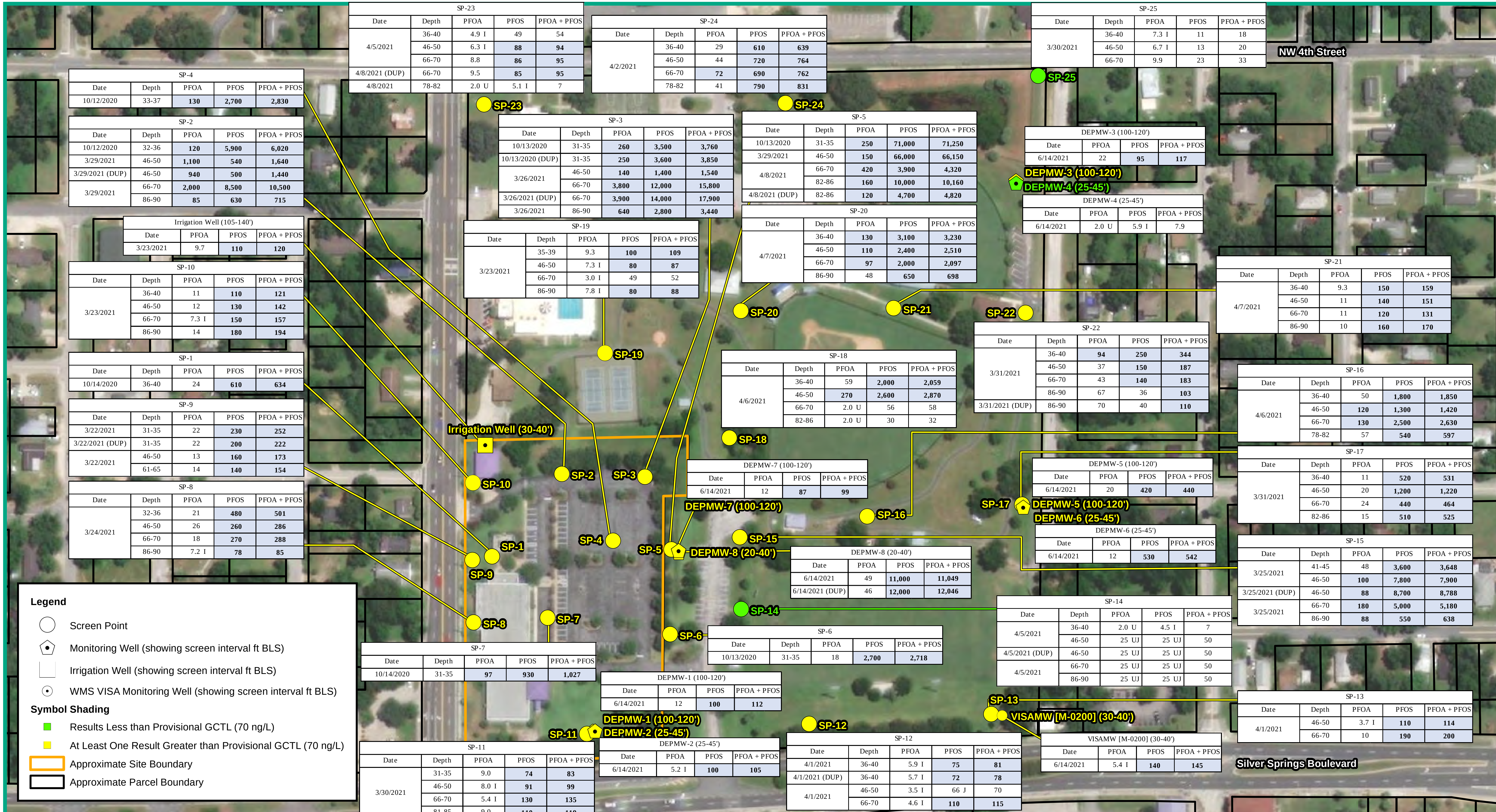

SP-23

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/5/2021	36-40	4.9 I	49	54
	46-50	6.3 I	**88**	**94**
	66-70	8.8	**86**	**95**
4/8/2021 (DUP)	66-70	9.5	**85**	**95**
4/8/2021	78-82	2.0 U	5.1 I	7

SP-24

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/2/2021	36-40	29	**610**	**639**
	46-50	44	**720**	**764**
	66-70	**72**	**690**	**762**
	78-82	41	**790**	**831**

SP-25

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/30/2021	36-40	7.3 I	11	18
	46-50	6.7 I	13	20
	66-70	9.9	23	33

SP-4

Date	Depth	PFOA	PFOS	PFOA + PFOS
10/12/2020	33-37	**130**	**2,700**	**2,830**

SP-2

Date	Depth	PFOA	PFOS	PFOA + PFOS
10/12/2020	32-36	**120**	**5,900**	**6,020**
3/29/2021	46-50	**1,100**	**540**	**1,640**
3/29/2021 (DUP)	46-50	**940**	**500**	**1,440**
3/29/2021	66-70	**2,000**	**8,500**	**10,500**
	86-90	**85**	**630**	**715**

Irrigation Well (105-140')

Date	PFOA	PFOS	PFOA + PFOS
3/23/2021	9.7	**110**	**120**

SP-10

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/23/2021	36-40	11	**110**	**121**
	46-50	12	**130**	**142**
	66-70	7.3 I	**150**	**157**
	86-90	14	**180**	**194**

SP-1

Date	Depth	PFOA	PFOS	PFOA + PFOS
10/14/2020	36-40	24	**610**	**634**

SP-9

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/22/2021	31-35	22	**230**	**252**
3/22/2021 (DUP)	31-35	22	**200**	**222**
3/22/2021	46-50	13	**160**	**173**
	61-65	14	**140**	**154**

SP-8

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/24/2021	32-36	21	**480**	**501**
	46-50	26	**260**	**286**
	66-70	18	**270**	**288**
	86-90	7.2 I	**78**	**85**

SP-3

Date	Depth	PFOA	PFOS	PFOA + PFOS
10/13/2020	31-35	**260**	**3,500**	**3,760**
10/13/2020 (DUP)	31-35	**250**	**3,600**	**3,850**
3/26/2021	46-50	**140**	**1,400**	**1,540**
	66-70	**3,800**	**12,000**	**15,800**
3/26/2021 (DUP)	66-70	**3,900**	**14,000**	**17,900**
3/26/2021	86-90	**640**	**2,800**	**3,440**

SP-19

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/23/2021	35-39	9.3	**100**	**109**
	46-50	7.3 I	**80**	**87**
	66-70	3.0 I	49	52
	86-90	7.8 I	**80**	**88**

SP-5

Date	Depth	PFOA	PFOS	PFOA + PFOS
10/13/2020	31-35	**250**	**71,000**	**71,250**
3/29/2021	46-50	**150**	**66,000**	**66,150**
4/8/2021	66-70	**420**	**3,900**	**4,320**
	82-86	**160**	**10,000**	**10,160**
4/8/2021 (DUP)	82-86	**120**	**4,700**	**4,820**

SP-20

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/7/2021	36-40	**130**	**3,100**	**3,230**
	46-50	**110**	**2,400**	**2,510**
	66-70	**97**	**2,000**	**2,097**
	86-90	48	**650**	**698**

DEPMW-3 (100-120')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	22	**95**	**117**

DEPMW-4 (25-45')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	2.0 U	5.9 I	7.9

SP-21

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/7/2021	36-40	9.3	**150**	**159**
	46-50	11	**140**	**151**
	66-70	11	**120**	**131**
	86-90	10	**160**	**170**

SP-22

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/31/2021	36-40	**94**	**250**	**344**
	46-50	37	**150**	**187**
	66-70	43	**140**	**183**
	86-90	67	36	**103**
3/31/2021 (DUP)	86-90	70	40	**110**

SP-18

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/6/2021	36-40	59	**2,000**	**2,059**
	46-50	**270**	**2,600**	**2,870**
	66-70	2.0 U	56	58
	82-86	2.0 U	30	32

SP-16

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/6/2021	36-40	50	**1,800**	**1,850**
	46-50	**120**	**1,300**	**1,420**
	66-70	**130**	**2,500**	**2,630**
	78-82	57	**540**	**597**

SP-17

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/31/2021	36-40	11	**520**	**531**
	46-50	20	**1,200**	**1,220**
	66-70	24	**440**	**464**
	82-86	15	**510**	**525**

DEPMW-7 (100-120')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	12	**87**	**99**

DEPMW-5 (100-120')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	20	**420**	**440**

DEPMW-6 (25-45')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	12	**530**	**542**

DEPMW-8 (20-40')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	49	**11,000**	**11,049**
6/14/2021 (DUP)	46	**12,000**	**12,046**

SP-15

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/25/2021	41-45	48	**3,600**	**3,648**
	46-50	**100**	**7,800**	**7,900**
3/25/2021 (DUP)	46-50	**88**	**8,700**	**8,788**
3/25/2021	66-70	**180**	**5,000**	**5,180**
	86-90	**88**	**550**	**638**

SP-14

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/5/2021	36-40	2.0 U	4.5 I	7
	46-50	25 UJ	25 UJ	50
4/5/2021 (DUP)	46-50	25 UJ	25 UJ	50
4/5/2021	66-70	25 UJ	25 UJ	50
	86-90	25 UJ	25 UJ	50

SP-6

Date	Depth	PFOA	PFOS	PFOA + PFOS
10/13/2020	31-35	18	**2,700**	**2,718**

SP-7

Date	Depth	PFOA	PFOS	PFOA + PFOS
10/14/2020	31-35	**97**	**930**	**1,027**

DEPMW-1 (100-120')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	12	**100**	**112**

DEPMW-2 (25-45')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	5.2 I	**100**	**105**

SP-11

Date	Depth	PFOA	PFOS	PFOA + PFOS
3/30/2021	31-35	9.0	**74**	**83**
	46-50	8.0 I	**91**	**99**
	66-70	5.4 I	**130**	**135**
	81-85	9.0	**110**	**119**

SP-12

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/1/2021	36-40	5.9 I	**75**	**81**
4/1/2021 (DUP)	36-40	5.7 I	**72**	**78**
4/1/2021	46-50	3.5 I	66 J	70
	66-70	4.6 I	**110**	**115**

VISAMW [M-0200] (30-40')

Date	PFOA	PFOS	PFOA + PFOS
6/14/2021	5.4 I	**140**	**145**

SP-13

Date	Depth	PFOA	PFOS	PFOA + PFOS
4/1/2021	46-50	3.7 I	**110**	**114**
	66-70	10	**190**	**200**

Figure 24
Summary of Analytical Results in Groundwater
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening criteria are presented in nanograms per liter (ng/L).
2. Depth is presented in feet below land surface (ft BLS).
3. I indicates result is between the laboratory method detection limit (MDL) and the laboratory practical quantitation limit.
4. J indicates estimated value and/or the analysis did not meet established quality control criteria.
5. U indicates that the compound was analyzed for but not detected. The report value is the MDL for the analyzed sample.
6. PFOA + PFOS indicates the summation of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS).
7. Blue shaded, bold text indicates an exceedance of the Florida Department of Environmental Protection provisional groundwater cleanup target level (GCTL) of 70 ng/L.
8. Site and parcel boundaries obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
9. 2019 World Imagery Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 29, 2021

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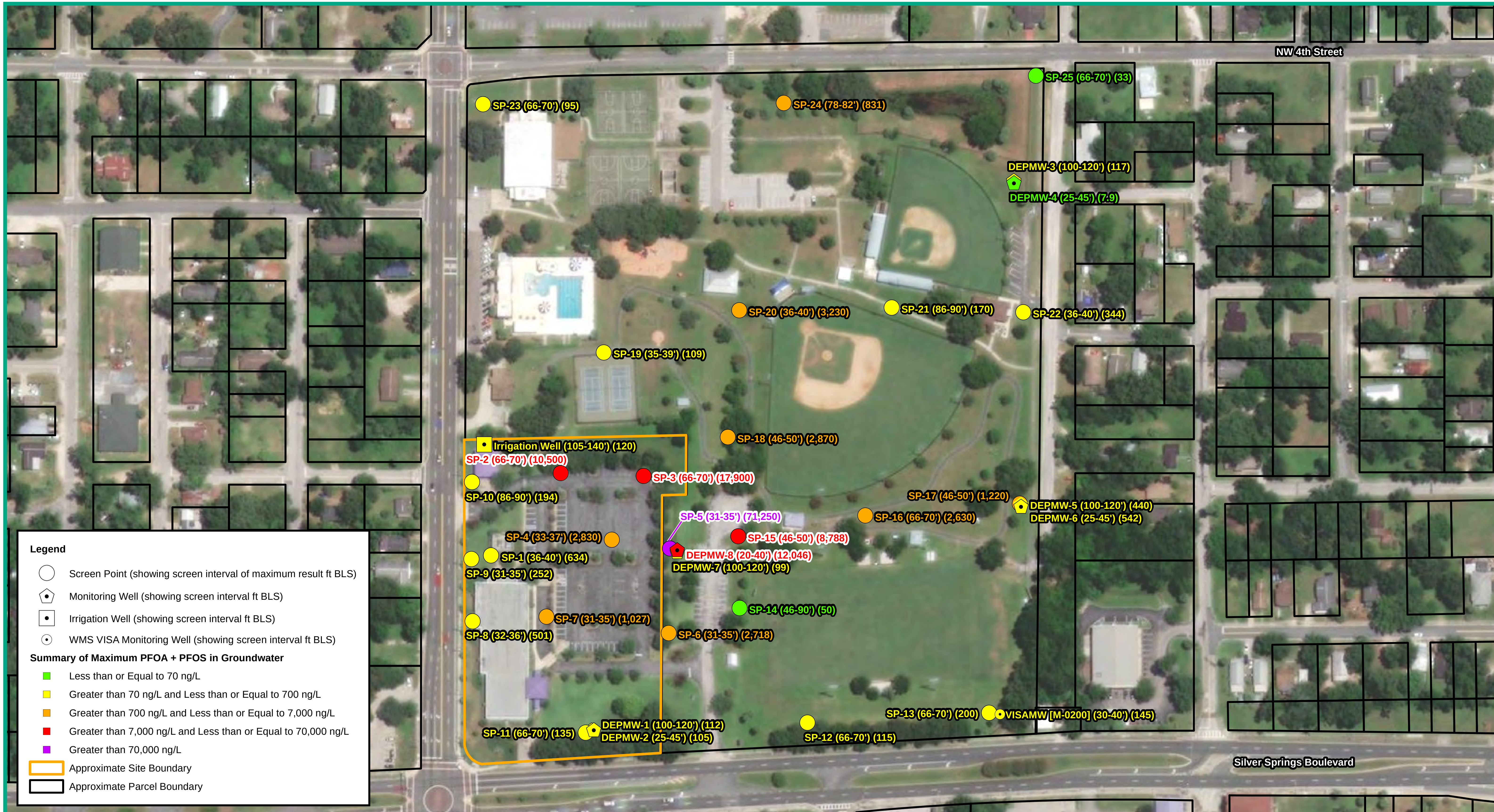


Figure 25
Summary of Maximum Concentrations of PFOA +PFOS in Groundwater
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results and screening criteria are presented in nanograms per liter (ng/L).
2. Depth (') is presented in feet below land surface (ft BLS).
3. PFOA + PFOS indicates the summation of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS).
4. Screening based on the Florida Department of Environmental Protection provisional groundwater cleanup target level (GCTL) of 70 ng/L.
5. Site and parcel boundaries obtained from Florida Department of Revenue Property Tax Oversight website (https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx), Marion County 2020.
6. 2019 World Imagery Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

Date: July 29, 2021

N

160 Feet

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

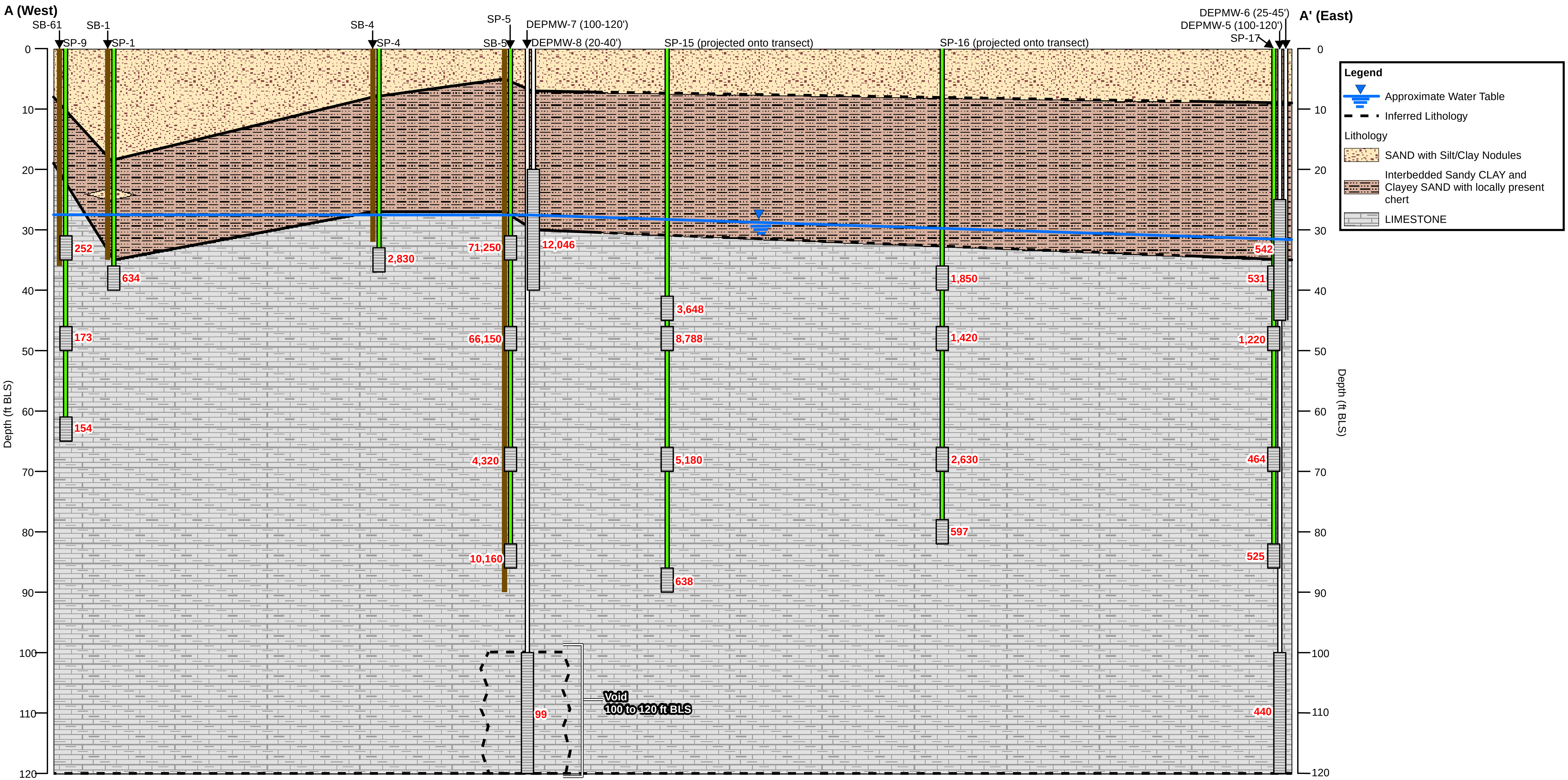


Figure 26
Vertical Profile of PFOA and PFOS in Groundwater from A-A
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

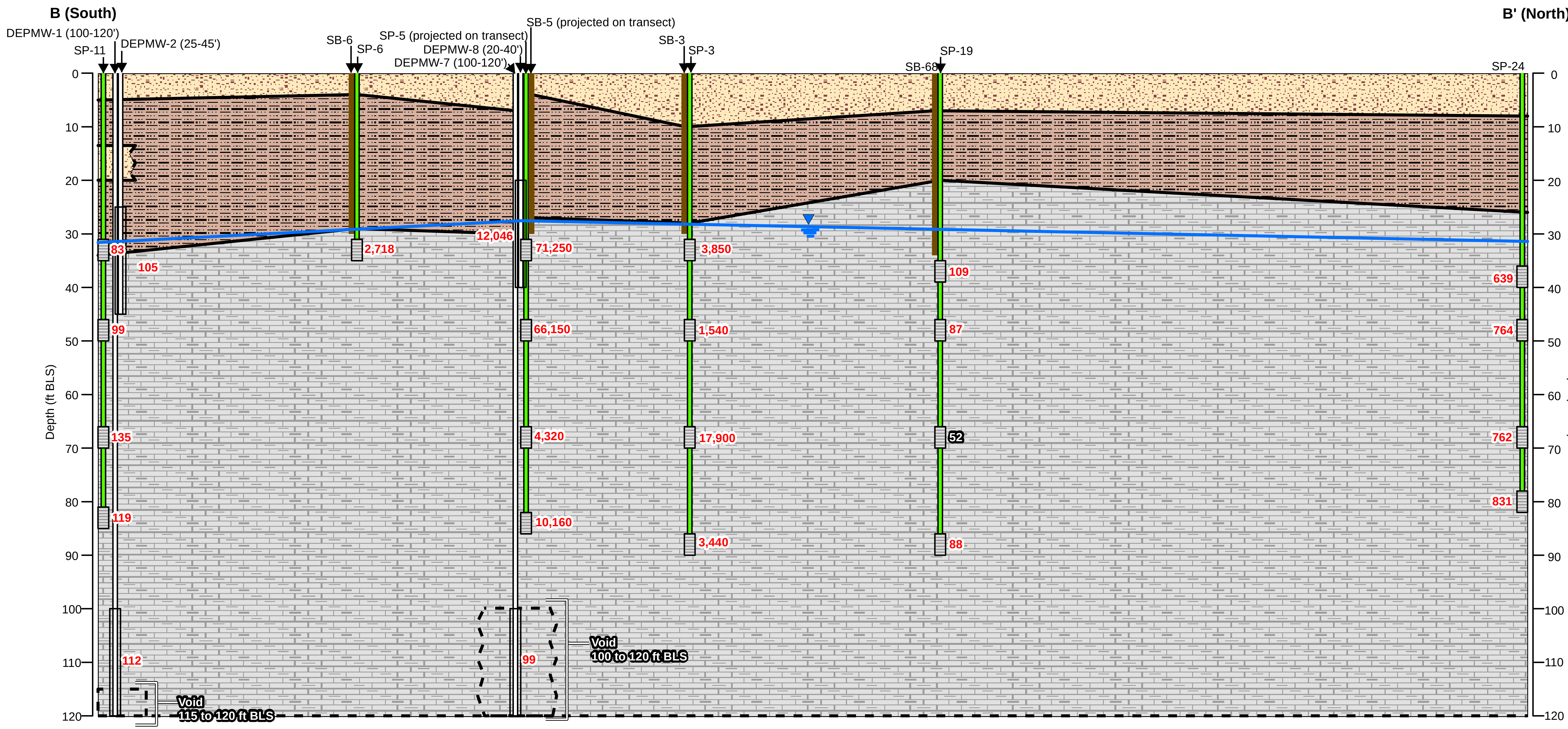
Notes:
1. Results are provided in nanograms per liter (ng/L).
2. ft BLS indicates feet below land surface.
3. Analytical results are shown for the summation of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS).
4. Refer to Figure 5 for the plan view of the cross-section transects layout.
5. The Florida Department of Environmental Protection provisional groundwater cleanup target level (GCTL) for the summation of PFOA and PFOS is 70 ng/L.
6. Contours were generated using the summation concentration of PFOA + PFOS. The highest concentration between a sample and its duplicate was utilized.
7. Red text indicates result is greater than the PFOA+PFOS GCTL.

Date: July 30, 2021

Soil Boring
Screen Point
Monitoring Well
Screen Interval
PFOA+PFOS (ng/L)
Screen Interval

N
80
Feet
Vertical Exaggeration = 5

Path: (Titusville-01\DATA) T:\0GIS\FR7522_FormerFSFC\MXDs\202107\CrossSection_AA_Vertical_Extent_202107.mxd 30 July 2021. Last Edited by: mhensley



Legend

- Approximate Water Table
- Inferred Lithology

Lithology

- SAND with Silt/Clay Nodules
- Interbedded Sandy CLAY and Clayey SAND with locally present chert
- LIMESTONE

Figure 27
Vertical Profile of PFOA and PFOS in Groundwater from B-B'
Former Florida State Fire College
1501 West Silver Springs Boulevard
Ocala, Marion County, Florida

Notes:
1. Results are provided in nanograms per liter (ng/L).
2. ft BLS indicates feet below land surface.
3. Analytical results are shown for the summation of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS).
4. Refer to Figure 5 for the plan view of the cross-section transects layout.
5. The Florida Department of Environmental Protection provisional groundwater cleanup target level (GCTL) for the summation of PFOA and PFOS is 70 ng/L.
6. Contours were generated using the summation concentration of PFOA + PFOS. The highest concentration between a sample and its duplicate was utilized.
7. Red text indicates result is greater than the PFOA+PFOS GCTL.

Soil Boring — Screen Point — Monitoring Well

Screen Interval — PFOA+PFOS (ng/L) — Screen Interval

Date: July 29, 2021

N

100 Feet

Vertical Exaggeration = 5

APPENDIX A

University of Florida Letters for Screening and Provisional Cleanup Target Levels

UF | UNIVERSITY of FLORIDA

Center for Environment & Human Toxicology

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Gainesville, FL 32611-0885
352-392-2243 Tel
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April 16, 2018

Brian Dougherty, PhD
Program Manager
District and Business Support Program
Division of Waste Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Development of alternative soil cleanup target levels for PFOA and PFOS

Dear Dr. Dougherty:

At your request, we have developed alternative soil cleanup target levels (ASCTLs) for perfluorooctanoic acid (PFOA; CAS# 335-67-1) and perfluorooctane sulfonate (PFOS; CAS# 1763-23-1). PFOA and PFOS are perfluoroalkyl substances (PFASs). PFASs are used to make products resistant to stains, grease, and water. Before production was phased out at the end of 2015, PFOA was used in carpets, leathers, textiles, upholstering, and as a waterproofing or stain-resistant agent (USEPA, 2016a). In 2002, the only major US manufacturer of PFOS agreed to phase out production. However, PFOA and PFOS degrade slowly and are persistent in the environment. Most contamination by PFOA and PFOS is a result of releases from manufacturing sites, industrial sites, fire training areas, and waste sites where these chemicals were disposed (USEPA, 2016a & 2016b). Derivation of the ASCTLs for each chemical is described below.

Perfluorooctanoic Acid (PFOA)

The United States Environmental Protection Agency (USEPA) summarized toxicity studies for PFOA in the Drinking Water Health Advisory for PFOA (USEPA, 2016a). For reference dose (RfD) development, several candidate studies and health effect endpoints were evaluated (Perkins et al., 2004; Lau et al., 2006; Wolf et al., 2007; White et al., 2009; DeWitt et al., 2008; Butenhoff et al., 2004). A total of six candidate RfDs were considered based upon endpoints including increased liver weight and necrosis in rats, decreased pup weight from gestational exposure in mice, immunosuppression in mice, reduced ossification and accelerated male puberty in offspring of mice, and reduced body weight and increased kidney weight (relative and absolute) in rats. For each animal toxicity study, human equivalent average serum PFOA concentrations were derived using a pharmacokinetic model by Wambaugh et al. (2013). An oral reference dose (RfD) was derived for each human equivalent no observed adverse effect level (NOAEL) or lowest observed adverse effect level (LOAEL) using study-specific uncertainty factors. Three endpoints resulted in a RfD of 2E-05 mg/kg-d (the lowest calculated RfD). Among these, reduced ossification of the proximal phalanges and accelerated puberty in offspring from treated dams in the study by Lau et al. (2006) were selected as the critical effect(s). Other studies producing the same or similar RfD values are considered supportive. Data were not considered adequate to derive a reference concentration (RfC) for inhalation exposure.

In the Lau et al. (2006) study, pregnant CD-1 mice were dosed with 1, 3, 5, 10, 20, or 40 mg/kg PFOA by oral gavage daily from gestational day 1 to 17. Decreased ossification of pup (both sexes) proximal phalanges and accelerated preputial separation were seen at 1 mg/kg PFOA. The USEPA calculated a human equivalent point of departure of 5.3E-03 mg/kg-d for these endpoints. An uncertainty factor of 300 (3 for extrapolation from animal to human, 10 for extrapolation from LOAEL to NOAEL, and 10 for sensitive individuals) was applied to derive an oral RfD of 2E-05 mg/kg-d. Greater than 95% of PFOA is absorbed by the gastrointestinal tract (ATSDR, 2015). Therefore, a gastrointestinal absorption factor of 1 was used to extrapolate the toxicity to other routes of exposure.

PFOA is also carcinogenic and has been shown to be tumorigenic in the liver, testes, and pancreas of rats. In humans, there is epidemiological evidence for an association between serum PFOA and kidney and testicular tumors (USEPA, 2016a). The USEPA developed an oral cancer slope factor of 7E-02 per mg/kg-d based on the development of testicular tumors in rats. They concluded that the drinking water health advisory based on non-cancer effects was protective for the cancer endpoint. We also calculated ASCTLs based on the oral cancer slope factor of 7E-02 per mg/kg-d (ASCTLs not shown). These ASCTLs were higher than those protective of non-cancer endpoints confirming that ASCTLs based on non-cancer effects are protective of the cancer endpoint.

Direct exposure ASCTLs for residential and commercial/industrial scenarios were calculated using the formula presented in Figure 5 of Chapter 62-777, Florida Administrative Code (F.A.C.). The equation is shown in Figure 1. Default assumptions listed in Table 1 were taken from OSWER Directive 9200.1-120 (USEPA, 2014) and Table 3 of Chapter 62-777, F.A.C. Chemical-specific parameters are presented in Table 2. **The residential ASCTL for PFOA is 1.3 mg/kg and the commercial/industrial ASCTL is 25 mg/kg.** A leachability ASCTL was derived using the formula presented in Figure 8 of Chapter 62-777, FAC. The equation is shown in Figure 2 and inputs are listed in Table 1. **The ASCTL for leachability to groundwater is 0.004 mg/kg** (based on an alternative groundwater cleanup target level of 0.1 μg/L provided to you in a letter dated April 12, 2017).

Perfluorooctane Sulfonate (PFOS)

The USEPA summarized toxicity studies for PFOS in the Drinking Water Health Advisory for PFOS (USEPA, 2016b). Six candidate studies and seven endpoints were identified for the derivation of an RfD for PFOS (Seacat et al., 2002 & 2003; Luebker et al., 2005a & 2005b; Butenhoff et al, 2009; Lau et al., 2003). Candidate endpoints included: 1) increased liver weight and histopathology, decreased body weight, and thyroid hormone disturbances in monkeys; 2) increased liver weight and histopathology, and increased liver enzymes and blood urea nitrogen in serum in male rats; 3) decreased body weight of rat pups; 4) another study showing decreased body weight in rat pups; 5) decreased maternal body weight, gestation length, and pup survival in rats; 6) developmental neurotoxicity in rats; and 7) decreased pup survival and decreased maternal and pup body weight in rats. For each animal toxicity study, human equivalent average serum PFOS concentrations were derived using a pharmacokinetic model by Wambaugh et al. (2013). An oral RfD was derived for each human equivalent NOAEL or LOAEL using study-specific uncertainty factors. Data were not considered adequate to derive a reference concentration (RfC) for inhalation exposure. The USEPA selected reduced pup weight from a two-generation study in rats as the critical effect. Low body weight was considered to be a marker for developmental effects, including effects that may not be manifested until later in life. This effect is considered relevant to humans because PFOS has been measured in the blood of newborns, in breast milk, and in blood of older children.

The developmental toxicity study by Luebker et al. (2005a) resulted in a RfD of 2E-05 mg/kg-d (the lowest calculated RfD). In this study, male and female rats were dosed with 0, 0.1, 0.4, 1.6, or 3.2 mg/kg-d by gavage from six weeks prior to mating, during mating, and, for females, through gestation and lactation across two generations. Rat pup weight was significantly decreased at 1.6 mg/kg-d PFOS in the F1 generation. The USEPA calculated a human equivalent point of departure of 5.1E-04 mg/kg-d based on decreased rat pup weight in the F1 generation. An uncertainty factor of 30 (3 for extrapolation from animal to human and 10 for sensitive subpopulations) was applied to derive an oral RfD of 2E-05 mg/kg-d. No data are available regarding the gastrointestinal absorption of PFOS. Therefore, a gastrointestinal absorption factor of 1 was used to extrapolate the toxicity to other routes of exposure.

There is also suggestive evidence that PFOS is carcinogenic in humans based on chronic studies in rats that result in liver and thyroid adenomas. However, the tumor data lack a dose-response relationship and could not be used by the USEPA to develop a cancer slope factor. Therefore, the critical effect for PFOS is developmental toxicity.

Direct exposure ASCTLs for residential and commercial/industrial scenarios were calculated using the formula presented in Figure 5 of Chapter 62-777, Florida Administrative Code (F.A.C.). The equation is shown in Figure 1. Default assumptions listed in Table 1 were taken from OSWER Directive 9200.1-120 (USEPA, 2014) and Table 3 of Chapter 62-777, F.A.C. Chemical-specific parameters are presented in Table 2. **The residential ASCTL for PFOS is 1.3 mg/kg and the commercial/industrial ASCTL is 25 mg/kg.** A leachability ASCTL was derived using the formula presented in Figure 8 of Chapter 62-777, FAC. The equation is shown in Figure 2 and inputs are listed in Table 1. **The ASCTL for leachability to groundwater is 0.01 mg/kg** (based on an alternative groundwater cleanup target level of 0.1 µg/L provided to you in a letter dated April 12, 2017).

As with the PFOA and PFOS alternative groundwater cleanup target levels (AGCTLs) provided to you previously, these ASCTLs have been calculated using default equations and exposure assumptions from Chapter 62-777, F.A.C. (the ASCTLs also include updated exposure assumptions from OSWER Directive 9200.1-120). Recently, the USEPA and a number of states have modified their calculation of PFOA and PFOS criteria based upon the critical effects, which are developmental in nature, and/or the availability of serum concentration data for these chemicals. For example, the USEPA Health Advisories for PFOA and PFOS in drinking water are based upon a water consumption rate for a lactating woman to protect the breast fed infant rather than a standard adult drinking water consumption rate. This higher rate of consumption leads to a lower acceptable drinking water concentration (0.07 µg/L rather than 0.1 µg/L calculated with Chapter 62-777 F.A.C. assumptions). New Jersey and Minnesota have both used serum concentration data rather than the USEPA oral reference dose to derive acceptable concentrations of PFOA and PFOS in drinking water that are lower than the USEPA Health Advisories. The Minnesota approach specifically targets serum concentrations in the breast fed infant. Other than a general protection of children when developing SCTLs, Florida has not typically tailored calculation of cleanup target levels (CTLs) to address sensitive life stages when they have been identified. With increased attention to the issue of sensitive life stages in the context of PFOA and PFOS exposure, the Florida Department of Environmental

Protection (FDEP) may want to consider as a general matter when and to what extent sensitive life stages should be addressed in CTL development.

Please let us know if you have any questions regarding the development of these ASCTLs.

Sincerely,

Leah D. Stuchal, Ph.D.

Stephen M. Roberts, Ph.D.

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Figure 1 – Equation for Developing Acceptable Soil Cleanup Target Levels for Non-Carcinogens:

$$\text{SCTL} = \frac{THI \times BW \times AT}{EF \times ED \times FC \times \left[\left(\frac{1}{RfD_o} \times IR_o \times 10^{-6} kg/mg \times RBA\right) + \left(\frac{1}{RfD_d} \times SA \times AF \times DA \times 10^{-6} kg/mg\right)\right]}$$

Figure 2 – Equation for the Determination of SCTLs Based on Leachability:

$$\text{SCTL}\ (mg/kg) = GCTL(\mu g/L) \times CF(mg/\mu g) \times DF \times \left[K_{oc} \times f_{oc} + \frac{\theta_w + \theta_a \times H'}{\rho_b}\right]$$

Table 1 - Default values for the direct contact and leachability equations

Symbol	Definition (units)	Receptor	Default
BW	Body weight (kg)	child	15
		worker	80
IR_o	Ingestion rate, oral (mg/day)	child	200
		worker	50
EF	Exposure frequency (days/yr)	child	350
		worker	250
ED	Exposure duration (years)	child	6
		worker	25
SA	Surface area exposed (cm^2/day)	child	2373
		worker	3527
AT	Averaging time (days) (non-carcinogens)	child	2190
		worker	9125
AF	Adherence factor (mg/cm^2)	child	0.2
		worker	0.12
IR_i	Inhalation rate (m^3/day)	child	8.1
		worker	20
DA	Dermal absorption (unitless) (organics)		0.1
PEF	Particulate emission factor (m^3/kg)		1.24×10^9
TR	Target risk (unitless)		1×10^{-6}
CF	Conversion factor (μg/mg)		1000
DAF	Dilution attenuation factor (unitless)		20
f_{oc}	Fraction organic carbon in soil (g/g)		0.002
Θ_ω	Water-filled soil porosity (L_{water}/L_{soil})		0.3
Θ_α	Air-filled soil porosity (L_{air}/L_{soil})		0.13
ρ_β	Dry soil bulk density (g/cm^3)		1.5
ω	Average soil moisture content (g_{water}/g_{soil})		0.2 (20%)
η	Total soil porosity (L_{pore}/L_{soil})		0.43
ρ_σ	Soil particle density (g/cm^3)		2.65
CF	Conversion factor (μg/mg)		1000

Table 2 – Chemical-specific parameters for PFOA and PFOS

Chemical-Specific Variable	PFOA		PFOS	
	Value	Source	Value	Source
RfD_o	2E-05 mg/kg-day	USEPA	2E-05 mg/kg-day	USEPA
RfD_d	2E-05 mg/kg-day	extrapolated	2E-05 mg/kg-day	extrapolated
RfD_i	2E-05 mg/kg-day	extrapolated	2E-05 mg/kg-day	extrapolated
Diffusivity in air	2.3E-02 cm^2/s	calculated	1.7E-02 cm^2/s	calculated
Diffusivity in water	5.8E-06 cm^2/s	calculated	4.2E-06 cm^2/s	calculated
Molecular weight	414.09 g/mol	HSDB	500.13 g/mol	HSDB
Density	1.792 g/cm^3	HSDB	1.25 g/cm^3	Chemicaland21
Henry's Law Constant	Not measurable	EPIWIN	Not measurable	EPIWIN
log K_{ow}	4.81	HSDB	4.49	EPIWIN
K_{oc}	655.1 L/kg	EPIWIN	2562 L/kg	EPIWIN

USEPA – United States Environmental Protection Agency
HSDB – Hazardous Substances Data Bank
EPIWIN – Estimation Programs Interface for Windows v4.1.1

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August 16, 2018

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Florida Department of Environmental Protection
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Tallahassee, FL 32399-2400

Re: Calculation of an AGCTL for PFOA/PFOS protective of sensitive lifestages

Dear Ms. Smith:

We have developed an alternative groundwater cleanup target level (AGCTL) for perfluorooctanoic acid (PFOA; CAS# 335-67-1) and perfluorooctane sulfonate (PFOS; CAS# 1763-23-1) protective of sensitive lifestages/receptors. We previously developed AGCTLs for PFOA and PFOS in letters to the Florida Department of Environmental Protection (FDEP) dated April 12, 2017. These AGCTLs incorporated updated toxicity values based on the USEPA Drinking Water Health Advisories for PFOA and PFOS (USEPA, 2016a & 2016b) and updated exposure parameters for adults listed in the 2011 Exposure Factors Handbook (USEPA, 2011). At that time, we were requested to use a drinking water ingestion rate applicable to a generic adult receptor, which is the approach used in the development of groundwater cleanup target levels (GCTLs) in Chapter 62-777, F.A.C. The resulting GCTL for both PFOA and PFOS was 0.1 µg/L.

The critical effects for both of these chemicals are developmental effects. For PFOA, the critical effects are decreased ossification of pup (both sexes) proximal phalanges and accelerated preputial separation. For PFOS, the critical effect is decreased pup weight in the F_1 generation. The F_1 generation is the first generation of pups born after parental exposure. Exposure usually takes place while pups are in utero and may last through lactation and weaning. Because the critical effects are development endpoints, adverse effects can result from short-term exposure during critical periods of development. The 90th percentile drinking water ingestion rate for lactating women (0.054 L/kg-d; USEPA, 2011) is used by the USEPA in the development of their drinking water criterion due to the potential increased susceptibility from higher drinking water rates during pregnancy and lactation (USEPA 2016a & 2016b). From a toxicological standpoint, it is more appropriate to use a drinking water ingestion rate applicable to the most sensitive lifestage/receptor in the development of a cleanup target level, than a default drinking water rate for an adult.

At your request, we have calculated AGCTLs for PFOA and PFOS protective of sensitive lifestages based on the 90th percentile drinking water ingestion rate of 0.054 L/kg-d for lactating women. For developmental effects, AGCTLs of 0.07 µg/L were derived for both PFOA and PFOS using the formula in Figure 2 of Chapter 62-777, FAC. The AGCTLs for these two chemicals are identical because their oral reference doses are also identical (2E-05 mg/kg-d). The calculation and exposure assumptions used are shown in Figure 1 below. Because of the similarity in adverse effects and potency of these chemicals, the USEPA recommends that, where PFOA and PFOS are co-located, the sum of the concentrations of these chemicals should be compared to the drinking water criterion (USEPA, 2016a & 2016b). Therefore, **the sum of PFOA and PFOS concentrations should be compared to the AGCTL of 0.07 μg/L.**

In deriving these AGCTLs, we note that the Agency for Toxic Substances and Disease Registry (ATSDR) has recently released for public comment a draft toxicological profile for perfluoroalkyl chemicals, including PFOA and PFOS. The proposed Minimal Risk Levels for PFOA and PFOS are an order of magnitude lower than their USEPA reference doses, prompting discussion within the scientific and regulatory community whether the USEPA reference doses should be re-visited and perhaps revised downward. We recommend following this discussion closely and making further modifications to the AGCTLs if warranted. Please let us know if you have any questions regarding the development of this AGCTL.

Sincerely,

Leah D. Stuchal, Ph.D.

Stephen M. Roberts, Ph.D.

References:

USEPA (2011) *Exposure Factors Handbook: 2011 Edition.* United States Environmental Protection Agency, National Center for Environmental Assessment, Office of Research and Development, Washington, DC.

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USEPA (2016b) *Drinking Water Health Advisory for Perfluorooctane Sulfonate (PFOS).* United States Environmental Protection Agency, Office of Water, Washington, DC.

Figure 1 – Equation for the derivation of a GCTL for PFOA and PFOS

$$GCTL\ (\mu g/L) = \frac{RfD_o \times RSC \times CF}{WC}$$

where:

Parameter	Definition	Value
GCTL	Groundwater cleanup target level (µg/L)	--
RfDo	Reference dose (mg/kg-d)	2E-05
RSC	Relative source contribution	0.2
CF	Conversion factor (µg/mg)	1000
WC	Water consumption (L/kg-d)	0.054

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January 3, 2019

Leah J. Smith
District and Business Support Program
Division of Waste Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Leachability SCTLs for PFOA and PFOS based on the alternative GCTL of 0.07 μg/L

Dear Ms. Smith:

At your request, we have calculated leachability soil cleanup target levels (SCTLs) for perfluorooctanoic acid (PFOA; CAS# 335-67-1) and perfluorooctane sulfonate (PFOS; CAS# 1763-23-1) based on the alternative groundwater cleanup target level (AGCTL) of 0.07 μg/L for the protection of sensitive lifestages. The leachability SCTLs were calculated using the equation in Figure 5 of Chapter 62-777, F.A.C. Chemical-specific properties used in the calculation were taken from our letter regarding the calculation of SCTLs for PFOA and PFOS (dated April 16, 2018. Based on these parameters, **the leachability SCTL for PFOA is 0.002 mg/kg and the leachability SCTL for PFOS is 0.007 mg/kg**. Please let us know if you have any questions regarding these calculations.

Sincerely,

Leah D. Stuchal, Ph.D.

Stephen M. Roberts, Ph.D.

White Paper

Development of Surface Water Screening Levels for PFOA and PFOS Based on the Protection of Human Health Using Probabilistic Risk Assessment

Prepared for the District and Business Support Program
Florida Department of Environmental Protection

Leah Stuchal, Ph.D. and Stephen M. Roberts, Ph.D.

Center for Environmental & Human Toxicology
University of Florida

April 2020

This white paper develops surface water screening levels for perfluorooctanoic acid (PFOA; CAS# 335-67-1) and perfluorooctane sulfonate (PFOS; CAS# 1763-23-1) protective of human health using probabilistic risk assessment (PRA). These screening levels are based on fish and shellfish ingestion pathways. PFOA and PFOS are manmade chemicals that belong to a group of thousands of chemicals known as perfluoroalkyl substances (PFAS). PFASs are water- and lipid-resistant. They are used as waterproofing and stain-resistant coatings for carpets, leather, textiles, furniture, and packaging materials. They are also used in fire-fighting foam and are added to aviation fluids to decrease flammability. PFOA and PFOS degrade slowly and are very persistent in the environment and the human body (USEPA, 2016a; USEPA, 2016b). The PFOA and PFOS present in surface water bioconcentrates and bioaccumulates into fish and shellfish that are consumed by local populations.

The following sections describe the technical basis for the proposed surface water screening levels.

Equation and assumptions

We calculated surface water screening levels protective of fish and shellfish consumption using a modified equation from the U.S. Environmental Protection Agency (USEPA) for the calculation of fish consumption limits based on concentrations of contaminants in fish tissue (USEPA, 2000a). The equation for non-carcinogens was used, modified by removing the drinking water intake component.

$$SWSL\ (\mu g/L) = \frac{RfD \times RSC \times BW \times CF}{\sum_{i=2}^{4}(FI_i \times BAF_i)}$$

Where:
SWSL = surface water screening level (μg/L)
RfD = oral reference dose (mg/kg-d)
RSC = relative source contribution
BW = body weight (kg)
CF = correction factor, 1000 μg/mg
FI_i = freshwater and estuarine finfish and shellfish consumption rate for aquatic trophic levels 2, 3, and 4 (kg/d)
BAF_i = bioaccumulation factor for aquatic trophic levels (TLs) 2, 3, and 4 (L/kg)
$\sum_{i=2}^{4}$ = summation of values for aquatic TLs, where the letter i stands for the TLs, starting with TL2 and continuing to TL4

For the PRA, body weight and freshwater and estuarine finfish and shellfish consumption rate (fish consumption rate) were chosen as distributions. Point values were selected for the other exposure parameters. This is identical to the PRA method proposed for the surface water standards in Chapter 62-302, F.A.C. (FDEP, 2016). The point value parameters are listed in Table 1 and the distributions for fish ingestion are provided in Table 2. Body weight was defined as a lognormal distribution with a mean of 79.96 kg and a standard deviation of 20.73 kg (USEPA, 2011). Figures showing the distributions for body weight and fish ingestion are included in Appendix A.

Table 1 – Point value parameters used in the derivation of surface water screening levels for PFOA and PFOS

Parameter	PFOA	PFOS	Source
Reference dose (mg/kg-d)	2E-05	2E-05	USEPA, 2016a USEPA, 2016b
Relative source contribution	0.6	0.6	CEHT, 2020
Bioaccumulation factor TL2 (L/kg)	35	937	See section on bioaccumulation factor
Bioaccumulation factor TL3 (L/kg)	71	2959	See section on bioaccumulation factor
Bioaccumulation factor TL4 (L/kg)	161	6304	See section on bioaccumulation factor

Table 2 – Fish ingestion lognormal distributions used in the PRA for the derivation of surface water screening levels for PFOA and PFOS

Trophic Level	Statistic	Atlantic (g/d)	Gulf (g/d)	Inland South (g/d)
2	Mean	4.9	4.2	3.1
	95^{th} Percentile	16.4	14.6	11.3
3	Mean	5.4	5.1	3.7
	95^{th} Percentile	16.6	16.4	11.9
4	Mean	2.6	2.5	2.8
	50^{th} Percentile	0.8	0.7	NA
	97^{th} Percentile	NA	NA	15.8

The fish ingestion distributions were derived from USEPA, 2014, Appendix E, Tables E-13, E-14, and E-15; NA – not applicable. This statistic was not used to define the distribution.

Reference Dose

The USEPA has developed reference doses for PFOA and PFOS in order to create drinking water Health Advisory Levels for these compounds. FDEP has used these reference doses for the calculation of alternative groundwater cleanup target levels (GCTLs) and soil cleanup target levels (SCTLs) for PFOA and PFOS (See letters to the FDEP dated April 16, 2018 and August 16, 2018 for details regarding the derivation of those screening levels). For consistency, the same RfD values are used in the surface water calculation, i.e., an oral reference dose (RfD) of 2E-05 mg/kg-d for both PFOA and PFOS.

We are aware that there is a lack of consistency among federal and state agencies in the derivation of safe limits for oral exposure to these substances. The Agency for Toxic Substances and Disease Registry (ATSDR) released a draft toxicity profile for PFAS, including PFOA and PFOS. The proposed Minimal Risk Levels (MRLs; analogous to RfDs) are an order of magnitude lower than the USEPA RfDs. This draft document received extensive public comment and has not yet been finalized. Additionally, North Carolina, Texas, Maine, Minnesota, and New Jersey have developed toxicity values for PFOA and PFOS based on differing endpoints and/or uncertainty factors. This results in different toxicity values than were proposed by the USEPA and ATSDR. California has also derived slope factors for PFOA and PFOS based on the development of pancreatic and liver tumors in male rats (CalEPA, 2019). The potential toxicity of PFOA and PFOS is a subject of active research, and the data available are rapidly evolving. Thus, while the USEPA RfD values are used for the surface water screening levels proposed here, we recommend re-visiting these screening levels as new information develops. Use of toxicity values developed based upon other endpoints, including cancer, instead of the USEPA RfDs will result in different screening level estimates that may be lower than those calculated here.

Body Weight

The Exposure Factors Handbook recommends using the body weight distributions calculated by Portier et al., (2007) for probabilistic risk assessment. For this analysis, body weight was defined as a lognormal distribution with a mean of 79.96 kg and a standard deviation of 20.73 kg (USEPA, 2011). This distribution represents the National Health and Nutrition Examination Survey (NHANES) IV estimated body weights for 18 to 65-year-old males and females. It was not truncated for the risk assessment. This body weight distribution was also used in the FDEP (2016) technical support document for the derivation of surface water standards.

Relative Source Contribution

This assessment uses the USEPA relative source contribution (RSC) values of 0.6 (60%) for both PFOA and PFOS. These chemical-specific RSCs for PFOA and PFOS were derived using the USEPA Exposure Decision Tree methodology (USEPA, 2000b), as explained in the companion white paper, "*Determination of Relative Source Contribution Values for Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) in Support of Development of Florida Surface Water Screening Levels*" (CEHT, April 2020). As described in this document, there are several potential sources for PFOA and PFOS identified in the literature, of which drinking water, diet, consumer products, and indoor air and dust may be important. RSC values were derived using the percentage method, taking into account exposure from drinking water consistent with current FDEP screening levels, dietary exposure, and potential exposure to other sources combined. From this analysis, 60% of the intake corresponding to the RfDs for PFOA and PFOS were allocated to surface water exposure in the form of consumption of fish and shellfish.

Finfish and Shellfish Consumption Rate

No current Florida-specific fish consumption studies are available. The Degner et al. (1994) fish consumption study in Florida was used previously to develop fish consumption rates for Chapter 62-302, F.A.C. It also includes Florida-specific data on shellfish consumption for the general population. However, it is dated and may not represent current fish consumption rates. Therefore, we used NHANES 2003-2010 fish consumption data. The NHANES data are presented based on age, gender, and geographic region. The USEPA document summarizing the NHANES fish and shellfish consumption data presents several consumer categories that may be relevant to fish consumption in Florida (USEPA, 2014). However, none are specific to Florida. Based on the differences in fish and shellfish consumption rates for each geographic region in the U.S., these national data may not be appropriate for Florida. Regional data applicable to Florida include the South, Gulf of Mexico coastal counties, and Atlantic coastal counties. The FDEP determined that the combination of these regions provide the best estimate for a fish consumption rate for Floridians. They calculated that 44.8% of the Florida population resides within the Atlantic coastal counties, 31.6% reside in the Gulf of Mexico coastal counties, and 23.6% reside in the South geographic region (FDEP, 2016).

The USEPA document summarizing the NHANES fish consumption data also includes estimates of fish consumption by trophic level for each region. We used fit statistics to describe lognormal distributions for the consumption rates in Tables E-13, E-14, and E-15 of that document (Table 2). These statistics represent the total freshwater and estuarine finfish and shellfish consumption rates for adults.

<u>Bioaccumulation Factor</u>

Bioaccumulation factors (BAFs) for PFOA and PFOS from the literature are listed in Appendix Tables B1 and B2. Studies that included data on bioaccumulation in the muscle tissue (e.g., fillet) were utilized to calculate the freshwater BAFs. These studies include fish not present in Florida (e.g., rainbow trout) and fish not usually consumed (e.g., minnows, whitebait). The BAFs for these fish were used to calculate a freshwater BAF for PFOA and PFOS because bioaccumulation data in fish and shellfish are limited. By including all of the data available, it provides a better estimate of the BAF.

Bioaccumulation factors for the derivation of human health surface water criteria were calculated based on a modified version of the USEPA framework for deriving BAFs (USEPA, 2016c). Based on the USEPA proposed framework, we utilized field BAFs to calculate baseline BAFs for PFOA and PFOS. Field BAFs are the preferred source for calculating BAFs for nonionic organic chemicals. Typically, in this methodology, a baseline BAF is calculated based on the field BAF, the concentration of particulate organic carbon (POC) in the water, the concentration of dissolved organic carbon (DOC) in the water, the chemical-specific n-octanol-water partition coefficient (Kow), and the fraction of finfish and shellfish tissue that is lipid. However, for the purposes of this assessment, the field BAFs were used as the baseline BAFs. The reasoning for this includes:

1. The POC and DOC were not known for the majority of the BAF studies. Calculation of the fraction of chemical in water that is freely dissolved would require assumptions regarding the amount of dissolved and particulate carbon. Although national averages may be used as defaults, the majority of studies took place outside the United States and default POC and DOC values for these countries are unknown.

2. The K_{ow} has not been measured for PFOA and PFOS. Calculation of a baseline BAF would require a K_{ow} based on physical/chemical property estimation software (e.g., EPI Suite).

3. Unlike most non-ionic organics, PFAS are not distributed to the lipid. Therefore, use of a lipid adjustment to derive a baseline BAF is inappropriate for PFAS chemicals.

Bioaccumulation factors were derived for each trophic level (TL). To calculate a BAF, the fish and shellfish from the bioaccumulation studies were assigned to trophic levels (Table B3). A bioaccumulation factor was calculated for each trophic level for both PFOA and PFOS. Individual field BAFs were combined as the geometric mean for each species. The baseline TL-specific BAF was calculated as the geometric mean of all species geometric means (Table 3). These calculations are presented in Tables B4 though B9. The Minnesota study (MPCA, 2007b) combined bluegill and white bass in their river bioaccumulation study. Because the BAFs were listed as geometric means (MPCA, 2007b), they were retained in the assessment.

Table 3 – Trophic level 2, 3, and 4 geometric mean bioaccumulation factors for PFOA and PFOS

Chemical	Trophic Level	BAF
PFOA	2	35
	3	71
	4	161
PFOS	2	937
	3	2959
	4	6304

Method for the probabilistic risk assessment

PFOA and PFOS surface water screening levels were calculated using PRA. In this analysis, body weight and fish consumption were defined as distributions and the other parameters were entered as point values. The surface water screening levels were derived in using 100,000 iterations of a Monte Carlo analysis in Crystal Ball software (Version 11.1) with a seed of 123457. Each iteration represents a hypothetical person in the population. For each iteration, the software chose a body weight from the distribution. Then, a region was chosen based on the percentage of Floridians who live in each area. Once the region was identified, the software chose a region-specific fish consumption rate for trophic levels 2, 3, and 4 (Table 2). The fish consumption rates for each trophic level were multiplied by their respective BAFs (Table 3) before being summed. There was no correlation between the fish consumption rates for the three TLs. We could not locate any data suggesting that a high-end consumer of fish and shellfish in TL2 would also be a high-end consumer of fish and shellfish in the other TLs. Using the equation provided in this document, the software generated a distribution of surface water concentrations equivalent to a hazard index of 1 for each iteration. The PFOA and PFOS screening levels were set at the 10^{th} percentile of this distribution. To check these values, the equation was rearranged and solved to ensure that the hazard index of 1 was not exceeded at the 90^{th} percentile (Chapter 62-780, F.A.C.).

Screening levels

Surface water screening levels for PFOA and PFOS were calculated using the equations and assumptions described in this document. The surface water screening level for PFOA is 0.5 μg/L and for PFOS is 0.01 μg/L (Table 4). The distributions are presented in Figures 1 and 2. We also calculated the hazard index for the screening levels to insure it was below 1 at the 90^{th} percentile. The hazard index for PFOA at a surface water screening level of 0.5 μg/L is 1 and the hazard index for PFOS at a screening level of 0.01 μg/L is 0.8 at the 90^{th} percentile. The screening level for PFOS at a hazard index of 1 is 0.012 μg/L. This was rounded to 1 significant figure, which decreased the hazard index at the 90^{th} percentile. The Crystal Ball output for the surface water screening level distributions and the distributions for the hazard index are presented in Appendix C.

Table 4 – Surface water screening levels for freshwater and estuarine finfish and shellfish for PFOA and PFOS

Surface Water Screening Levels (µg/L)	PFOA	PFOS
Freshwater and estuarine finfish and shellfish	0.5	0.01

Screening levels were rounded to one significant figure

Figure 1 – Surface water screening level distribution for PFOA

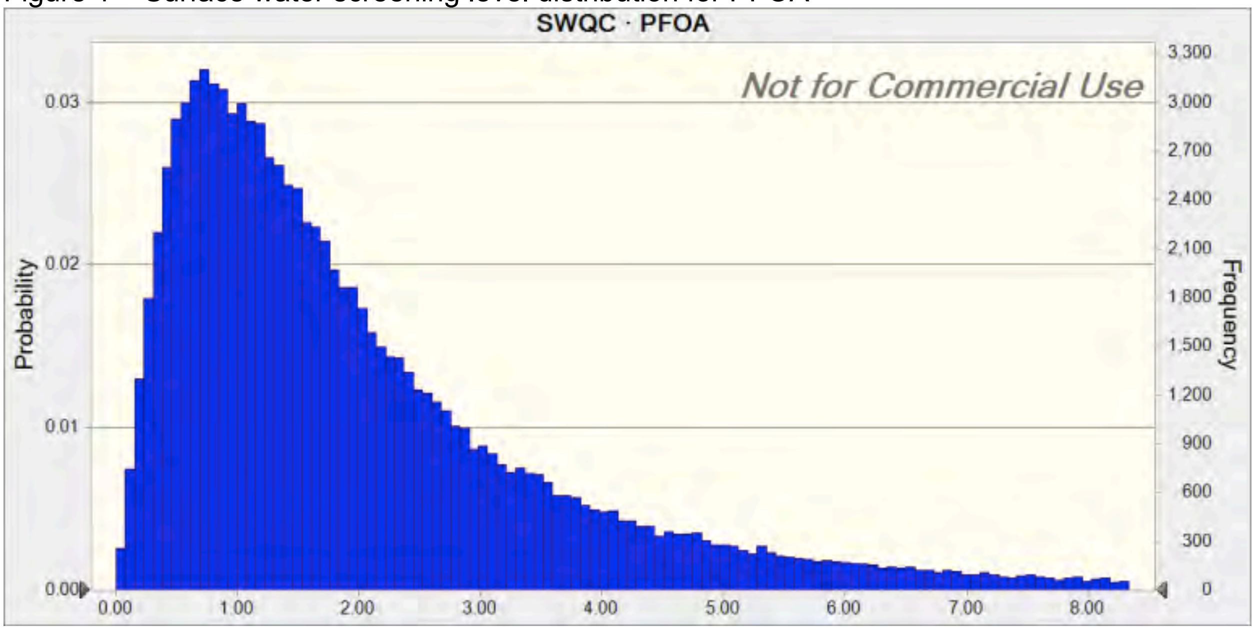
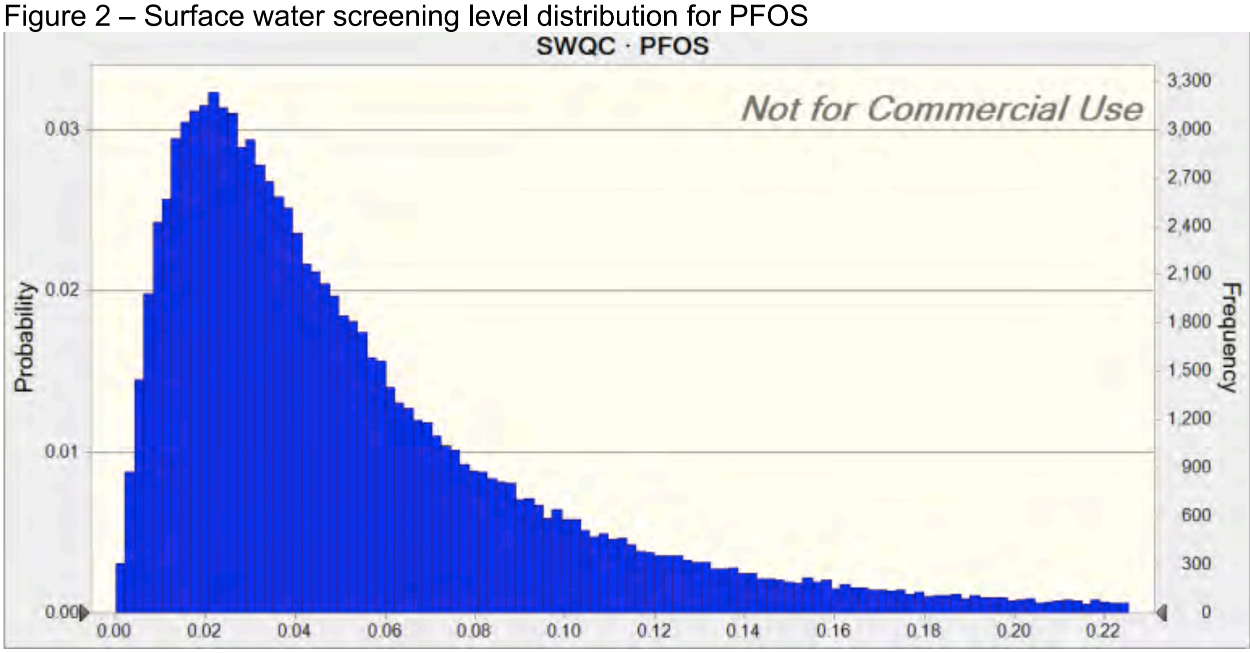


Figure 2 – Surface water screening level distribution for PFOS



The USEPA drinking water Health Advisory Levels (HALs) for PFOA and PFOS are each 0.07 µg/L. The USEPA recommends that the combined concentrations of PFOA and PFOS in drinking water be compared with this limit, based upon an assumption that their effects are additive. The rationale for this assumption is that their RfDs are derived for the same toxic endpoint (developmental effects) and that, although the mode of action for these effects has not been established, it is likely to be the same for these closely related chemicals. The fact that their individual Health Advisory Levels are identical makes it relatively straightforward to implement this recommendation. While the same argument could be made that the surface water screening levels for PFOA and PFOS should also address combined effects, this is more difficult because of the large difference in their values, approximately an order of magnitude. Picking the lower, higher, or average of these values for comparison with combined PFOA and PFOS concentrations could result in gross over- or underestimation of risk, depending on the individual PFOA and PFOS concentrations. As a practical matter, comparison of PFOA and PFOS concentrations in surface water with the screening levels should be made individually.

Surface water screening levels in Florida and other states

Table 5 – State surface water screening levels

State	PFOA (µg/L)	PFOS (µg/L)
Florida	0.5	0.01
Minnesota (lakes)	1.6	0.006
Minnesota (rivers)	2.7	0.007
Michigan	12	0.012
Alaska	0.07*	0.07*

* - Concentrations of PFOA and PFOS are summed before being compared to the criterion.

Minnesota has also developed freshwater surface water criteria based on fish consumption for the protection of human health. These criteria are based on site-specific bioaccumulation factors. For PFOA, the Minnesota surface water criteria include 1.6 µg/L for lakes and 2.7 µg/L for rivers (MPCA, 2017; Table 5). These criteria are higher than our proposed screening level of 0.5 µg/L. The difference in values is due to the use of a higher oral reference dose (1.4E-04 mg/kg-d) and slightly lower bioaccumulation factor (40 L/kg for lakes and 24 L/kg for rivers). Recently, the Minnesota Department of Health (MDOH) updated their reference doses for PFOA and PFOS (MDOH, 2019a; MDOH, 2019b). The updated reference dose for PFOA is 1.8E-05 mg/kg-d (MDOH, 2019a). Using this reference dose in their surface water equation would decrease the Minnesota criterion by approximately one order of magnitude. These updated values would be slightly lower than our proposed screening level of 0.5 µg/L.

The screening level for PFOS is lower than PFOA due to the large bioaccumulation factor for PFOS. For PFOS, the Minnesota surface water criteria include 0.006 µg/L for lakes 0.007 µg/L for rivers (MPCA, 2017). Our proposed PFOS screening level of 0.01 µg/L is similar to these two criteria. This is due to the use of a similar reference dose (8E-05 mg/kg-d) and bioaccumulation factors (6,087 L/kg for lakes and 3,877 for rivers) (MPCA, 2010a; MPCA, 2010b). The MDOH updated reference dose for PFOS is 3.1E-06 mg/kg-d (MDOH, 2019b). Use of this reference dose would lower the PFOS criteria to less than 0.001 µg/L, which is an order of magnitude below our proposed screening level.

The Michigan Department of Environmental Quality (MDEQ) criteria for PFOA and PFOS are human health-based non-cancer values for non-drinking surface water sources.

They were derived based on Michigan Rule 57 for toxic substances (MDEQ, 2020; Table 5). Their surface water screening level for PFOA is an order of magnitude greater than the screening level of 0.5 μg/L proposed in this document. The Michigan surface water screening level for PFOS is equivalent to our proposed PFOS surface water value of 0.01 μg/L. The Alaska Department of Environmental Conservation uses a criterion of 0.07 μg/L for PFAS in surface water used as drinking water (ADEC, 2019; Table 5). The criterion includes the sum of PFOA and PFOS concentrations. It is based on the USEPA drinking water HAL.

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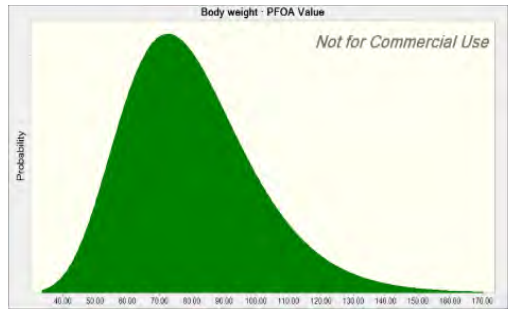
Appendix A

Crystal Ball Report - Assumptions

Assumptions

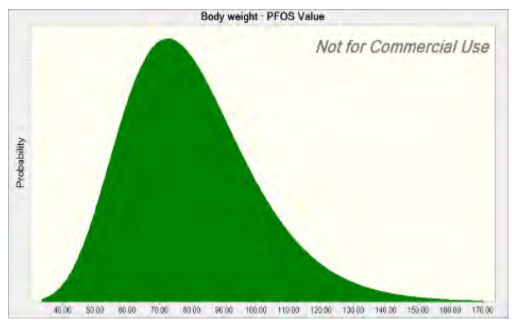
Assumption: Body weight · PFOA Value



Lognormal distribution with parameters:

Location	0.00
Mean	79.96
Std. Dev.	20.73

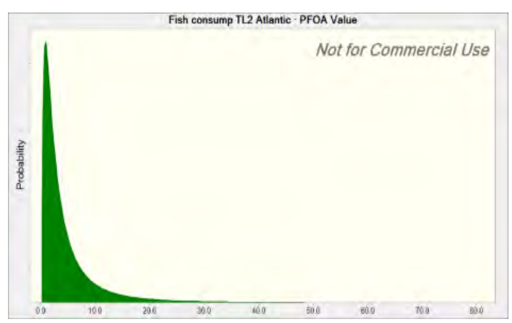
Assumption: Body weight · PFOS Value



Lognormal distribution with parameters:

Location	0.00
Mean	79.96
Std. Dev.	20.73

Assumption: Fish consump TL2 Atlantic · PFOA Value



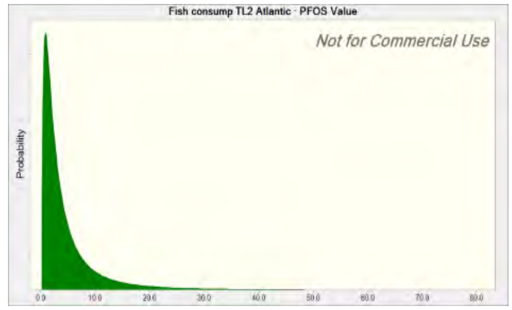
Lognormal distribution with parameters:

Location	0.0
Mean	4.9
95%	16.4

Assumption: Fish consump TL2 Atlantic · PFOS Value

Lognormal distribution with parameters:

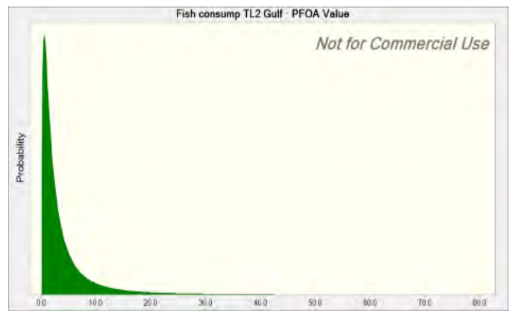
Location	0.0
Mean	4.9
95%	16.4



Assumption: Fish consump TL2 Gulf · PFOA Value

Lognormal distribution with parameters:

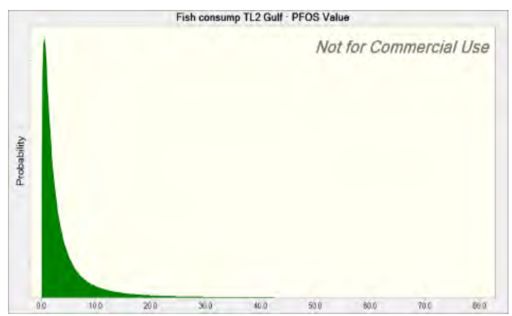
Location	0.0
Mean	4.2
95%	14.6



Assumption: Fish consump TL2 Gulf · PFOS Value

Lognormal distribution with parameters:

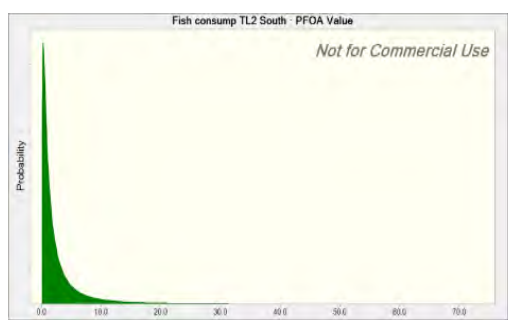
Location	0.0
Mean	4.2
95%	14.6



Assumption: Fish consump TL2 South · PFOA Value

Lognormal distribution with parameters:

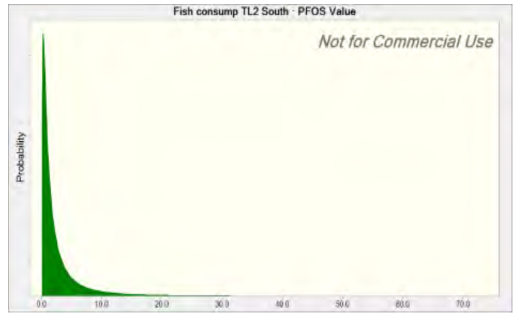
Location	0.0
Mean	3.1
95%	11.3



Assumption: Fish consump TL2 South · PFOS Value

Lognormal distribution with parameters:

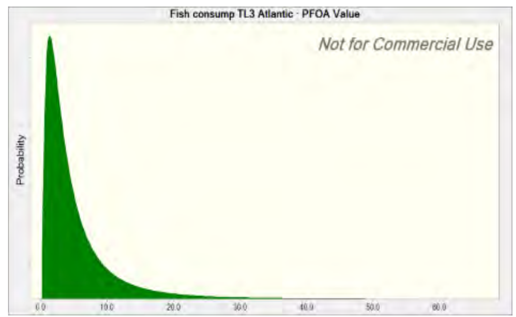
Location	0.0
Mean	3.1
95%	11.3



Assumption: Fish consump TL3 Atlantic · PFOA Value

Lognormal distribution with parameters:

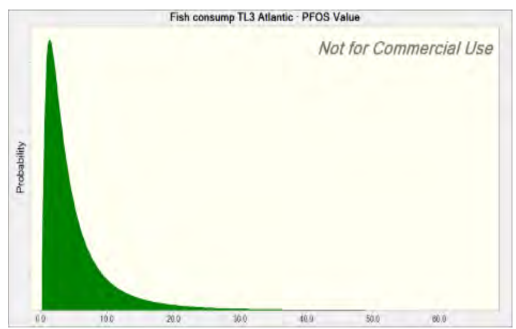
Location	0.0
Mean	5.4
95%	16.6



Assumption: Fish consump TL3 Atlantic · PFOS Value

Lognormal distribution with parameters:

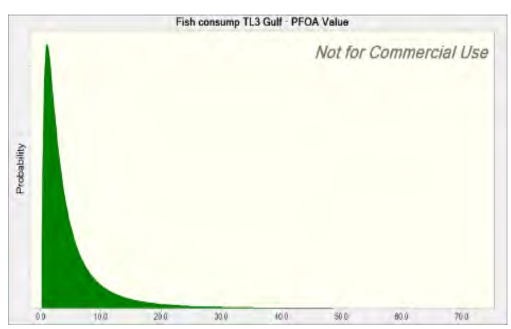
Location	0.0
Mean	5.4
95%	16.6



Assumption: Fish consump TL3 Gulf · PFOA Value

Lognormal distribution with parameters:

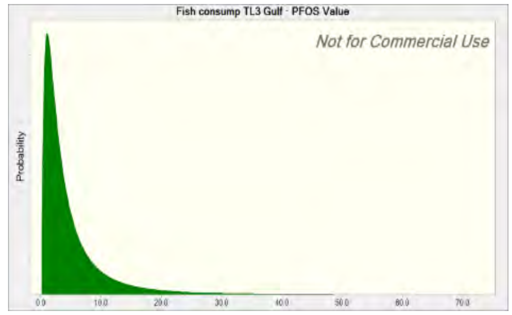
Location	0.0
Mean	5.1
95%	16.4



Assumption: Fish consump TL3 Gulf · PFOS Value

Lognormal distribution with parameters:

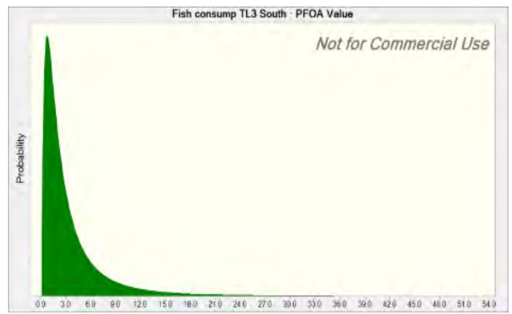
Location	0.0
Mean	5.1
95%	16.4



Assumption: Fish consump TL3 South · PFOA Value

Lognormal distribution with parameters:

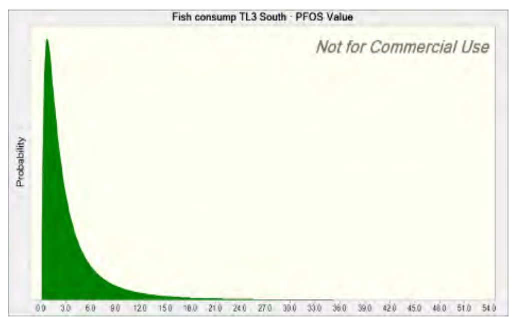
Location	0.0
Mean	3.7
95%	11.9



Assumption: Fish consump TL3 South · PFOS Value

Lognormal distribution with parameters:

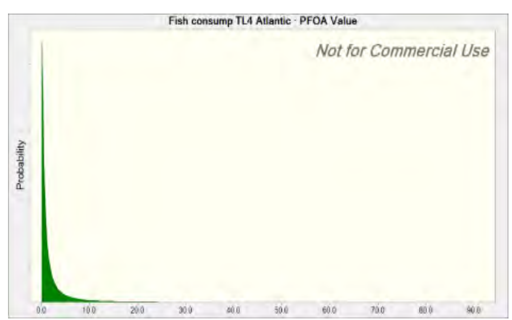
Location	0.0
Mean	3.7
95%	11.9



Assumption: Fish consump TL4 Atlantic · PFOA Value

Lognormal distribution with parameters:

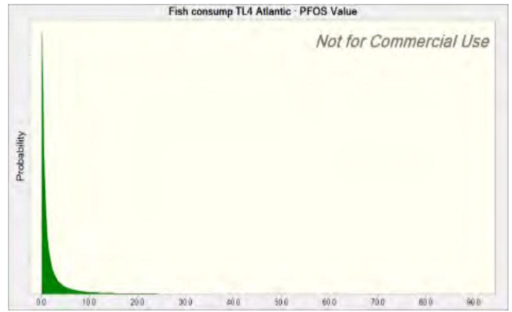
Location	0.0
Mean	2.6
50%	0.8



Assumption: Fish consump TL4 Atlantic · PFOS Value

Lognormal distribution with parameters:

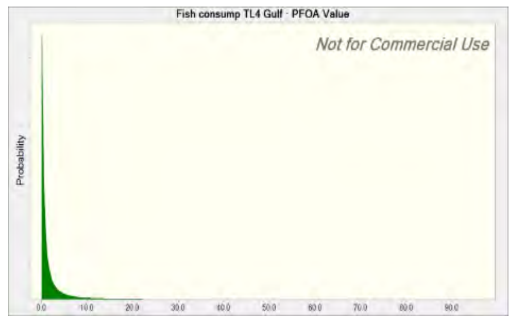
Location	0.0
Mean	2.6
50%	0.8



Assumption: Fish consump TL4 Gulf · PFOA Value

Lognormal distribution with parameters:

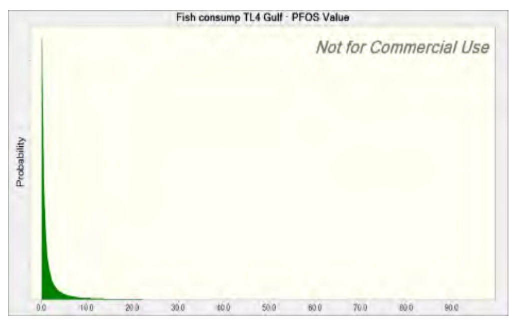
Location	0.0
Mean	2.5
50%	0.7



Assumption: Fish consump TL4 Gulf · PFOS Value

Lognormal distribution with parameters:

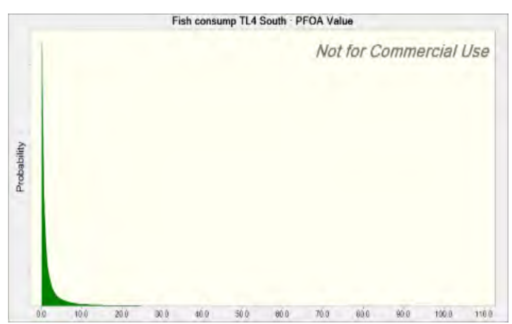
Location	0.0
Mean	2.5
50%	0.7



Assumption: Fish consump TL4 South · PFOA Value

Lognormal distribution with parameters:

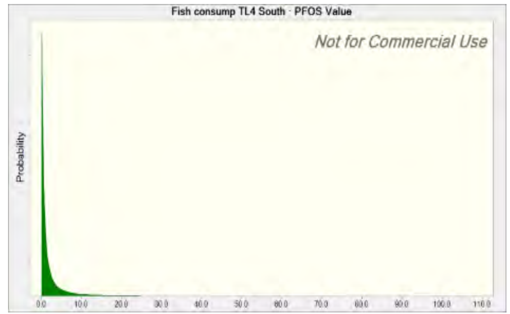
Location	0.0
Mean	2.8
97%	15.8



Assumption: Fish consump TL4 South · PFOS Value

Lognormal distribution with parameters:

Location	0.0
Mean	2.8
97%	15.8



Appendix B

Table B1 – Bioaccumulation factors for PFOA in fish fillets and shellfish tissue

Species	Place	Fresh or Marine	Exposure	Tissue	BAF	Study
Common carp	laboratory	Fresh	static 28d, 28d flow through depuration	muscle	3.85	Fang et al, 2016
Minnow	Taihu Lake, China	Fresh	wild caught	muscle	112.5	Fang et al., 2014
Silver carp	Taihu Lake, China	Fresh	wild caught	muscle	11.8	Fang et al., 2014
Whitebait	Taihu Lake, China	Fresh	wild caught	muscle	147	Fang et al., 2014
Crucian carp	Taihu Lake, China	Fresh	wild caught	muscle	81	Fang et al., 2014
Lake saury	Taihu Lake, China	Fresh	wild caught	muscle	284	Fang et al., 2014
Common carp	Taihu Lake, China	Fresh	wild caught	muscle	177	Fang et al., 2014
Mongolian culter	Taihu Lake, China	Fresh	wild caught	muscle	161	Fang et al., 2014
Mud fish	Taihu Lake, China	Fresh	wild caught	muscle	163	Fang et al., 2014
Chinese bitterling	Taihu Lake, China	Fresh	wild caught	muscle	87.9	Fang et al., 2014
Goby	Taihu Lake, China	Fresh	wild caught	muscle	37.7	Fang et al., 2014
Common carp	China	Fresh	wild caught	muscle	182	Zhou et al., 2012
White shrimp	Taihu Lake, China	Fresh	wild caught	soft part	12.5	Fang et al., 2014
Pearl mussel	Taihu Lake, China	Fresh	wild caught	soft part	39.7	Fang et al., 2014

BAF – bioaccumulation factor

Table B2 – Bioaccumulation factors for PFOS in fish fillets and shellfish tissue

Species	Place	Fresh or Marine	Exposure	Tissue	BAF (L/kg)	Study
Bluegill	Lake Calhoun, MN	Fresh	wild caught	fillet	2802	MPCA, 2007b
Bluegill and white bass	Mississippi River, MN	Fresh	wild caught	fillet	5737	MPCA, 2007b
Common carp	laboratory	Fresh	static 28d, 28d flow through depuration	muscle	9500	Fang et al, 2016
Minnow	Taihu Lake, China	Fresh	wild caught	muscle	3212	Fang et al., 2014
Silver carp	Taihu Lake, China	Fresh	wild caught	muscle	832	Fang et al., 2014
Whitebait	Taihu Lake, China	Fresh	wild caught	muscle	1350	Fang et al., 2014
Crucian carp	Taihu Lake, China	Fresh	wild caught	muscle	6898	Fang et al., 2014
Lake saury	Taihu Lake, China	Fresh	wild caught	muscle	4401	Fang et al., 2014
Common carp	Taihu Lake, China	Fresh	wild caught	muscle	3679	Fang et al., 2014
Mongolian culter	Taihu Lake, China	Fresh	wild caught	muscle	6927	Fang et al., 2014
Mud fish	Taihu Lake, China	Fresh	wild caught	muscle	4854	Fang et al., 2014
Chinese bitterling	Taihu Lake, China	Fresh	wild caught	muscle	2861	Fang et al., 2014
Goby	Taihu Lake, China	Fresh	wild caught	muscle	2876	Fang et al., 2014
Common carp	China	Fresh	wild caught	muscle	11749	Zhou et al., 2012
Taihu Lake shrimp	Taihu Lake, China	Fresh	wild caught	soft part	2161	Fang et al., 2014
White shrimp	Taihu Lake, China	Fresh	wild caught	soft part	978	Fang et al., 2014
Freshwater mussel	Taihu Lake, China	Fresh	wild caught	soft part	256	Fang et al., 2014
Pearl mussel	Taihu Lake, China	Fresh	wild caught	soft part	466	Fang et al., 2014

BAF – bioaccumulation factor

Table B3 – Trophic level weighting for fish and shellfish in the PFOA and PFOS bioaccumulation studies

Fish and shellfish	Scientific Name	Trophic Level 2 Weighting	Trophic Level 3 Weighting	Trophic Level 4 Weighting	Reference
Minnow	*Hemiculter leucisculus*	0	1	0	FishBase.org
Silver carp	*Hypophthalmichthys molitrix*	0	1	0	USEPA 2014
Whitebait	*Reganisalanx brachyrostralis*	0	1	0	FishBase.org
Crucian carp	*Carassius cuvieri*	0	1	0	USEPA 2014
Lake saury	*Coilia mystus*	0	1	0	FishBase.org
Common carp	*Cyprinus carpio*	0	1	0	USEPA 2014
Mongolian culter	*Culter mongolicus*	0	0.5	0.5	FishBase.org
Mud fish	*Misgurnus anguillicaudatus*	0	1	0	FishBase.org
Chinese bitterling	*Rhodeus sinensis*	0.5	0.5	0	FishBase.org
Goby	*Ctenogobius giurinus*	0	1	0	FishBase.org
White shrimp	*Exopalaemon sp.*	0.5	0.5	0	USEPA 2014
Pearl mussel	*Lamellibranchia sp.*	1	0	0	USEPA 2014
Bluegill	*Lepomis macrochirus*	0	1	0	FishBase.org
White bass[a]	*Morone chrysops*	0	0	1	USEPA 2014
Taihu Lake shrimp	*Macrobrachium nipponense*	0.5	0.5	0	USEPA 2014
Freshwater mussel	*Lamellibranchia sp.*	1	0	0	USEPA 2014

[a] – The white bass value is the geometric mean concentration of *Lepomis macrochirus* and *Morone chrysops*

Table B4 – Species-specific TL2 BAFs and geometric mean TL2 BAF for PFOA

Species	Scientific name	TL2 BAF
Chinese bitterling	*Rhodeus sinensis*	87.9
White shrimp	*Exopalaemon sp.*	12.5
Pearl mussel	*Lamellibranchia sp.*	39.7
	Geometric mean TL2 BAF	35

TL – trophic level
BAF – bioaccumulation factor

Table B5 – Species-specific TL3 BAFs and geometric mean TL3 BAF for PFOA

Species	Scientific name	TL3 BAF
Minnow	*Hemiculter leucisculus*	112.5
Silver carp	*Hypophthalmichthys molitrix*	11.8
Whitebait	*Reganisalanx brachyrostralis*	147
Crucian carp	*Carassius cuvieri*	81
Lake saury	*Coilia mystus*	284
Common carp	*Cyprinus carpio*	50
Mongolian culter	*Culter mongolicus*	161
Mud fish	*Misgurnus anguillicaudatus*	163
Chinese bitterling	*Rhodeus sinensis*	87.9
Goby	*Ctenogobius giurinus*	37.7
White shrimp	*Exopalaemon sp.*	12.5
	Geometric mean TL3 BAF	71

TL – trophic level
BAF – bioaccumulation factor

Table B6 – Species-specific TL4 BAFs and geometric mean TL4 BAF for PFOA

Species	Scientific name	TL4 BAF
Mongolian culter	*Culter mongolicus*	161
	Geometric mean TL4 BAF	161

TL – trophic level
BAF – bioaccumulation factor

Table B7 – Species-specific TL2 BAFs and geometric mean TL2 BAF for PFOS

Species	Scientific name	TL2 BAF
Chinese bitterling	*Rhodeus sinensis*	2861
White shrimp	*Exopalaemon sp.*	978
Pearl mussel	*Lamellibranchia sp.*	466
Taihu Lake shrimp	*Macrobrachium nipponense*	2161
Freshwater mussel	*Lamellibranchia sp.*	256
	Geometric mean TL2 BAF	937

TL – trophic level
BAF – bioaccumulation factor

Table B8 – Species-specific TL3 BAFs and geometric mean TL3 BAF for PFOS

Species	Scientific name	TL3 BAF
Minnow	*Hemiculter leucisculus*	3212
Silver carp	*Hypophthalmichthys molitrix*	832
Whitebait	*Reganisalanx brachyrostralis*	1350
Crucian carp	*Carassius cuvieri*	6898
Lake saury	*Coilia mystus*	4401
Common carp	*Cyprinus carpio*	7433
Mongolian culter	*Culter mongolicus*	6927
Mud fish	*Misgurnus anguillicaudatus*	4854
Chinese bitterling	*Rhodeus sinensis*	2861
Goby	*Ctenogobius giurinus*	2876
White shrimp	*Exopalaemon sp.*	978
Bluegill	*Lepomis macrochirus*	2802
Taihu Lake shrimp	*Macrobrachium nipponense*	2161
	Geometric mean TL3 BAF	2959

TL – trophic level
BAF – bioaccumulation factor

Table B9 – Species-specific TL4 BAFs and geometric mean TL4 BAF for PFOS

Species	Scientific name	TL4 BAF
Mongolian culter	*Culter mongolicus*	6927
White bass	*Morone chrysops*	5737
	Geometric mean TL4 BAF	6304

TL – trophic level
BAF – bioaccumulation factor

Appendix C

Crystal Ball Report - Forecasts

Run preferences:
- Number of trials run: 100,000
- Monte Carlo
- Seed: 123457
- Precision control on
  - Confidence level: 95.00%

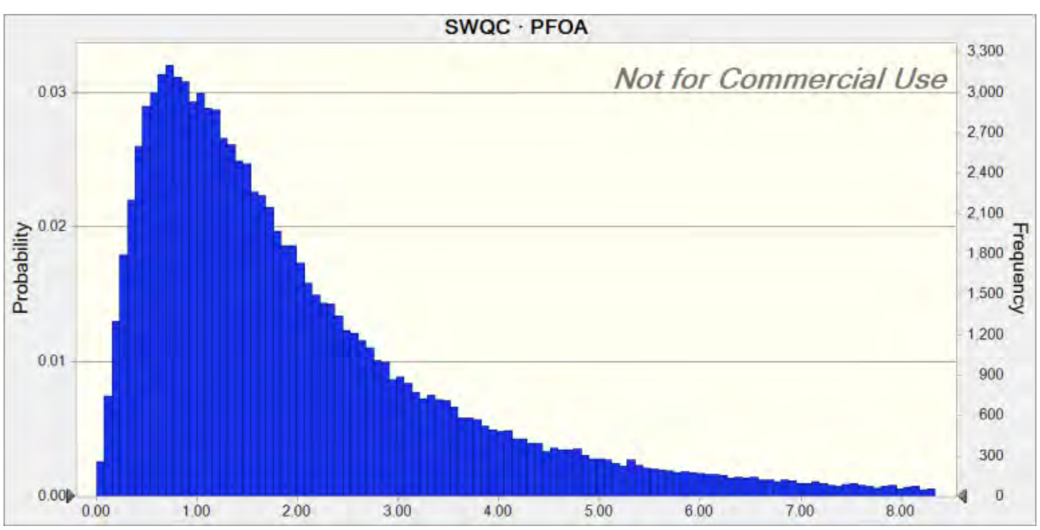
Run statistics:
- Total running time (sec): 57.11
- Trials/second (average): 1,751
- Random numbers per sec: 38,525

Crystal Ball data:
- Assumptions: 22
  - Correlations: 0
  - Correlation matrices: 0
- Decision variables: 0
- Forecasts: 12

Forecasts

Forecast: SWQC · PFOA

Summary:
- Entire range is from 0.00 to 55.36
- Base case is 1.16
- After 100,000 trials, the std. error of the mean is 0.01



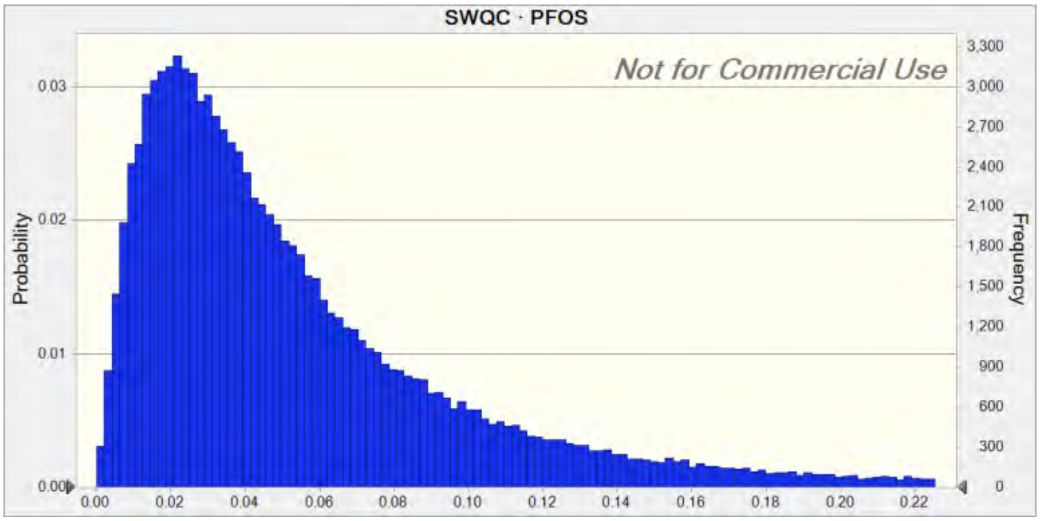
Statistics:	Forecast values
Trials	100,000
Base Case	1.16
Mean	2.19
Median	1.56
Mode	---
Standard Deviation	2.20
Variance	4.82
Skewness	3.91
Kurtosis	36.47
Coeff. of Variation	1.00
Minimum	0.00
Maximum	55.36
Range Width	55.36
Mean Std. Error	0.01

Forecast: SWQC · PFOA (cont'd)

Percentiles:	Forecast values
0%	0.00
10%	0.49
20%	0.74
30%	0.99
40%	1.26
50%	1.56
60%	1.93
70%	2.42
80%	3.15
90%	4.53
100%	55.36

Forecast: SWQC · PFOS

Summary:
Entire range is from 0.00 to 1.30
Base case is 0.03
After 100,000 trials, the std. error of the mean is 0.00



Statistics:	Forecast values
Trials	100,000
Base Case	0.03
Mean	0.06
Median	0.04
Mode	---
Standard Deviation	0.06
Variance	0.00
Skewness	3.61
Kurtosis	28.36
Coeff. of Variation	1.01
Minimum	0.00
Maximum	1.30
Range Width	1.30
Mean Std. Error	0.00

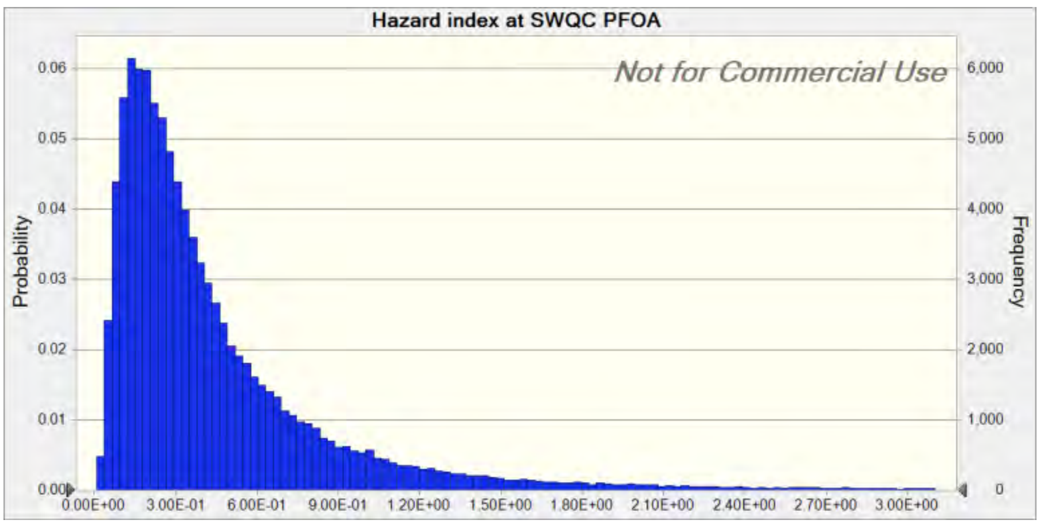
Forecast: SWQC · PFOS (cont'd)

Percentiles:	Forecast values
0%	0.00
10%	0.01
20%	0.02
30%	0.03
40%	0.03

50%	0.04
60%	0.05
70%	0.06
80%	0.09
90%	0.12
100%	1.30

Forecast: Hazard index at SWQC PFOA

Summary:
Entire range is from 8.85E-03 to 1.30E+02
Base case is 4.21E-01
After 100,000 trials, the std. error of the mean is 2.93E-03



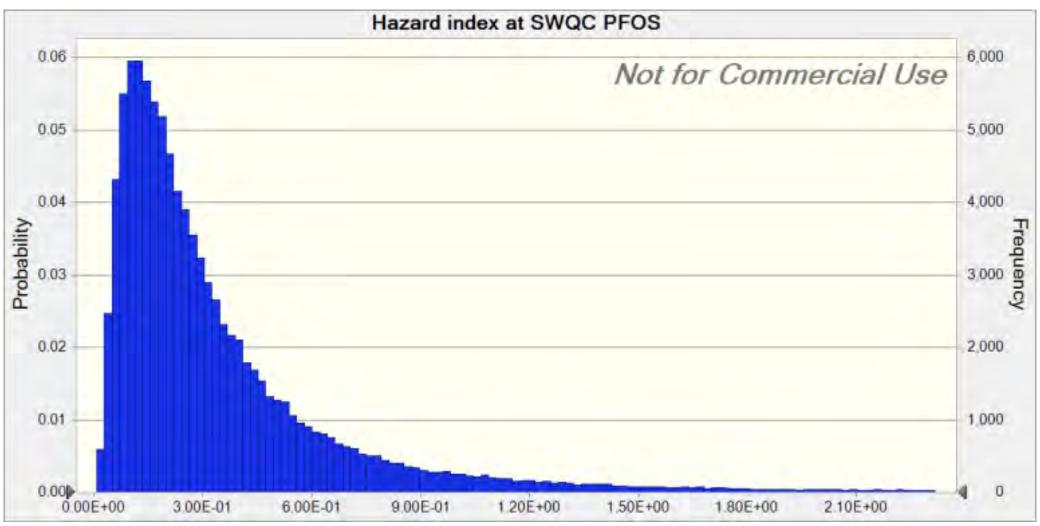
Statistics:	Forecast values
Trials	100,000
Base Case	4.21E-01
Mean	5.04E-01
Median	3.14E-01
Mode	---
Standard Deviation	9.28E-01
Variance	8.60E-01
Skewness	39.79
Kurtosis	4,200.66
Coeff. of Variation	1.84
Minimum	8.85E-03
Maximum	1.30E+02
Range Width	1.30E+02
Mean Std. Error	2.93E-03

Forecast: Hazard index at SWQC PFOA (cont'd)

Percentiles:	Forecast values
0%	8.85E-03
10%	1.08E-01
20%	1.55E-01
30%	2.03E-01
40%	2.54E-01
50%	3.14E-01
60%	3.90E-01
70%	4.94E-01
80%	6.61E-01
90%	9.99E-01
100%	1.30E+02

Forecast: Hazard index at SWQC PFOS

Summary:
Entire range is from 7.67E-03 to 6.68E+01
Base case is 3.28E-01
After 100,000 trials, the std. error of the mean is 2.17E-03



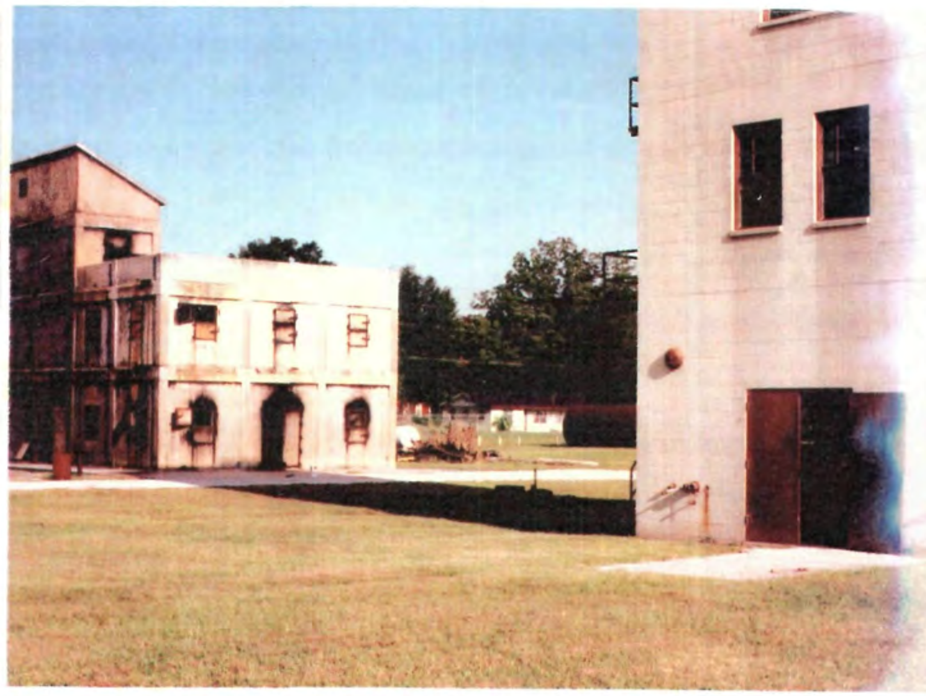
Statistics:	Forecast values
Trials	100,000
Base Case	3.28E-01
Mean	3.93E-01
Median	2.42E-01
Mode	---
Standard Deviation	6.87E-01
Variance	4.72E-01
Skewness	23.39

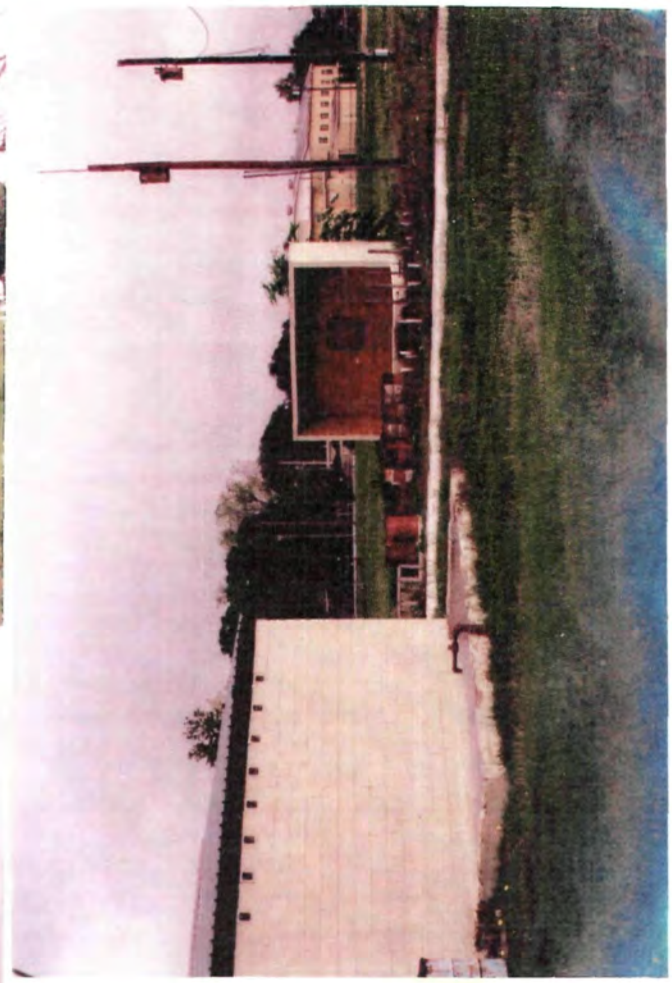
Kurtosis	1,359.36
Coeff. of Variation	1.75
Minimum	7.67E-03
Maximum	6.68E+01
Range Width	6.68E+01
Mean Std. Error	2.17E-03

Forecast: Hazard index at SWQC PFOS (cont'd)

Percentiles:	Forecast values
0%	7.67E-03
10%	8.16E-02
20%	1.18E-01
30%	1.54E-01
40%	1.94E-01
50%	2.42E-01
60%	3.01E-01
70%	3.83E-01
80%	5.11E-01
90%	7.79E-01
100%	6.68E+01

APPENDIX B
Historical Site Photos













APPENDIX C
Final IDW Manifests

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number FLEXEMPT	2. Page 1 of 1	3. Emergency Response Phone (813)390-0859	4. Waste Tracking Number 1124-01

5. Generator's Name and Mailing Address
F D E P
2600 Blair Stone Rd
Tallahassee, FL 32399
(850) 245-8700
Generator's Phone:

Generator's Site Address (if different than mailing address)
FORMER FLORIDA STATE FIRE COLLEGE c/o
Geosyntec
1501 WEST SILVER SPRINGS BLVD
Ocala, FL 34475 (ERIC 5641)

6. Transporter 1 Company Name: UNIVERSAL ENVIRONMENTAL SOLUTIONS, LLC — U.S. EPA ID Number: FLR000199802

7. Transporter 2 Company Name: — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
US ECOLOGY
2002 N. Orient Rd.
Tampa, FL 33619 (813)623-5302
Facility's Phone:
U.S. EPA ID Number: FLD981932494

9. Waste Shipping Name and Description	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.
1. Non Regulated Material, Solids (IDW, Drill Cuttings) Approval # K200694TPA	003	DM	165	G
2. Non Regulated Material, Liquids (IDW, Development Water) Approval # K201684	004	DM	220	G
3.				
4.				

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: K. Boone Abbott (as agent of FDEP) — Signature: [signature] — Month 11 Day 24 Year 20

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Steve Hageman UES — Signature: [signature] — Month 11 Day 24 Year 2020
Transporter 2 Printed/Typed Name: Kevin Coechado — Signature: [signature] — Month 12 Day 07 Year 20

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator) — U.S. EPA ID Number:
Facility's Phone:
17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Ann Streger — Signature: [signature] — Month 12 Day 7 Year 20

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	**4. Waste Tracking Number**

5. Generator's Name and Mailing Address: FDEP, 2600 Blair Stone Rd, Tallahassee, FL 32399

Generator's Phone: (850) 245-8700

Generator's Site Address (if different than mailing address): Former Florida State Fire College, 1501 W. Silver Springs Blvd., Ocala, FL 24475

6. Transporter 1 Company Name: Erwin Remediation, Inc. — U.S. EPA ID Number: FLR000223867

7. Transporter 2 Company Name: — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Ecosouth Services, 12950-A Highway 43, Axis, AL 36505 — U.S. EPA ID Number:

Facility's Phone:

GENERATOR

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1. Non-Hazardous Soil/Mud	1	DM		
2. Non Hazardous water	3	DM		
3.				
4.				

13. Special Handling Instructions and Additional Information

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.

Generator's/Offeror's Printed/Typed Name	Signature	Month	Day	Year
Boone Abbott (as agent of FDEP)	[signature]	3	30	21

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of Entry/Exit: ____

Transporter Signature (for exports only): Date Leaving U.S.: ____

TRANSPORTER

16. Transport Acknowledgement of Receipt of Materials

	Printed/Typed Name	Signature	Month	Day	Year
Transporter 1	Tyler Marolf	[signature]	3	30	21
Transporter 2					

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA IS Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name	Signature	Month	Day	Year
Bolaszia Johnson	[signature]	4	12	21

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	**4. Waste Tracking Number**

GENERATOR

5. Generator's Name and Mailing Address: FDEP, 2600 Blair Stone Road, Tallahassee, FL 32399

Generator's Phone: (850) 245-8700

Generator's Site Address (if different than mailing address): Former Florida State Fire College, 1501 W. Silver Springs Blvd., Ocala, FL 24475

6. Transporter 1 Company Name: Erwin Remediation, Inc. — U.S. EPA ID Number: FLR000223867

7. Transporter 2 Company Name: — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Ecosouth Services, 12950-A Highway 43, Axis, AL 36505 — U.S. EPA ID Number:

Facility's Phone:

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1. Non-Hazardous Soil	1	DM		
2. Non-Hazardous Groundwater	5	DM		
3.				
4.				

13. Special Handling Instructions and Additional Information

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.

Generator's/Offeror's Printed/Typed Name: Boone Abbott (as agent of FDEP) — Signature: [signature] — Month 4 Day 13 Year 21

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of Entry/Exit:

Transporter Signature (for exports only): Date Leaving U.S.:

TRANSPORTER

16. Transport Acknowledgement of Receipt of Materials

Transporter 1 Printed/Typed Name: Tyler Marolf — Signature: [signature] — Month 4 Day 13 Year 21

Transporter 2 Printed/Typed Name: — Signature: — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA IS Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name: Marci Mumisott — Signature: M. Mamund — Month 4 Day 26 Year 21

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number

2. Page 1 of

3. Emergency Response Phone

4. Waste Tracking Number

5. Generator's Name and Mailing Address FDEP
2600 Blair Stone Rd
Tallahassee, FL 32399

Generator's Phone: (850)245-8700

Generator's Site Address (if different than mailing address)
Former Florida State Fire College
1501 W. Silver Springs Blvd.
Ocala, FL 24475

6. Transporter 1 Company Name
Erwin Remediation, Inc.

U.S. EPA ID Number
FLR000223867

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
Ecosouth Services
12950-A Highway 43
Axis, AL 36505

Facility's Phone:

U.S. EPA ID Number

GENERATOR

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1. Non-Hazardous Soil/Mud	20	DM		
2. Non-Hazardous Water	28	DM		
3.				
4.				

13. Special Handling Instructions and Additional Information

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.

Generator's/Offeror's Printed/Typed Name: Boone Abbott (as agent of FDEP)
Signature: [signature]
Month 5 Day 27 Year 21

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S.
Port of Entry/Exit:
Transporter Signature (for exports only):
Date Leaving U.S.:

TRANSPORTER

16. Transport Acknowledgement of Receipt of Materials

Transporter 1 Printed/Typed Name: Tyler Mardf
Signature: T. Mardf
Month 5 Day 27 Year 21

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)

U.S. EPA IS Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name: M. Morrissette
Signature: M. Morrissette
Month Day Year: 10 [illegible]

2

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	**4. Waste Tracking Number**

GENERATOR

5. Generator's Name and Mailing Address: FDEP, 2600 Blairstone Road, Tallahassee, FL 32399

Generator's Phone: (850) 245-8700

Generator's Site Address (if different than mailing address): Former Florida State Fire College, 1501 W. Silver Springs Blvd., Ocala, FL 24475

6. Transporter 1 Company Name: Erwin Remediation, Inc. — U.S. EPA ID Number: FLR000223867

7. Transporter 2 Company Name: — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Ecosouth Services, 12950-A Highway 43, Axis, AL 36505 — U.S. EPA ID Number:

Facility's Phone:

9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1. Non-Hazardous Groundwater	3	DM			
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.

Generator's/Offeror's Printed/Typed Name: Boone Abbott (as agent of FDEP) — Signature: [signature] — Month 6 Day 17 Year 21

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of Entry/Exit:

Transporter Signature (for exports only): Date Leaving U.S.:

TRANSPORTER

16. Transport Acknowledgement of Receipt of Materials

Transporter 1 Printed/Typed Name: William Cell — Signature: [signature] — Month 6 Day 17 Year 21

Transporter 2 Printed/Typed Name: — Signature: — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA IS Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name: M. Morrisette — Signature: M. Morrisette — Month/Day/Year: 6/21